

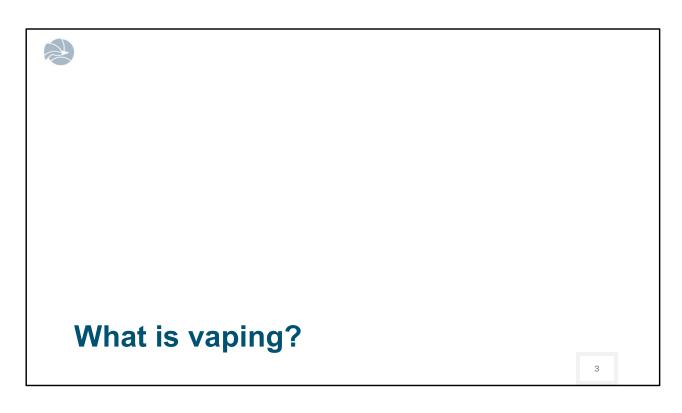
Thank you for taking the time to attend this presentation about vaping, and how you can protect yourself and the people you care about.



We will cover a number of topics in this presentation.

What is vaping?
How does a vaping device work?
What substances can be used in a vaping device?
Protect yourself from vaping
Talking about vaping

And, at the end you'll have a chance to show what you know about vaping.



So – what is vaping?

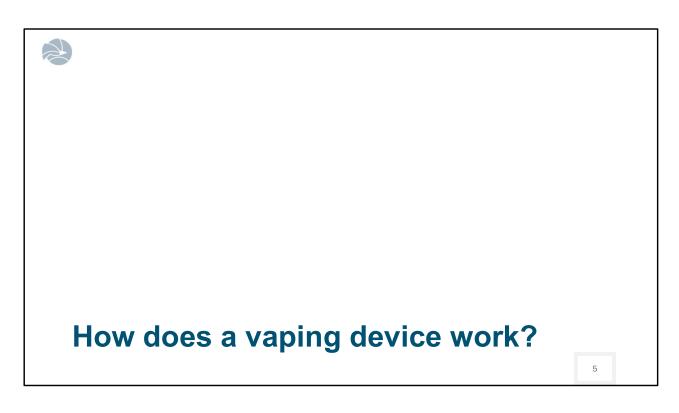
[ASK QUESTION & GET RESPONSES]



[ASK QUESTION & GET RESPONSES, THEN CLICK]

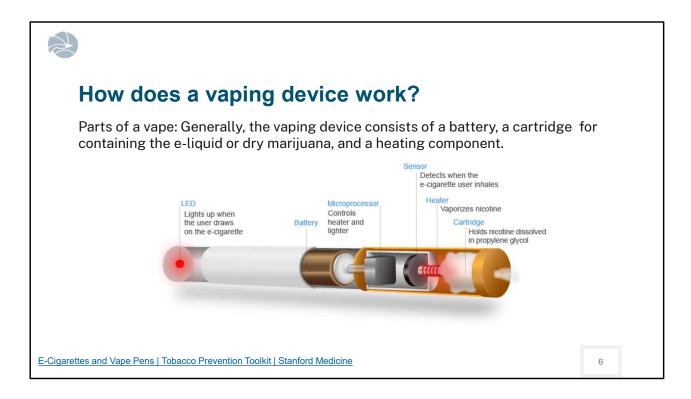
This is a pretty formal definition, but it is clear: "Vaping is the act if inhaling and exhaling an aerosol or vapor made from a liquid or dry material that is heated in an electronic powered device, called an electronic cigarette, or e-cigarette."

A simpler way to think about it is that it is sucking in and then blowing out vapor made by heating a liquid or dry substance in a vape device.



So – How does a vape work?

[ASK QUESTION & GET RESPONSES, THEN CLICK]



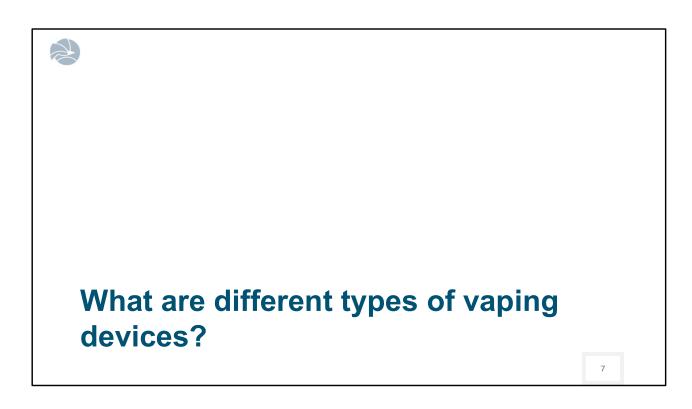
There are many different types of vapes, but they all work on a similar principle.

Essentially, a sensor detects when a user inhales.

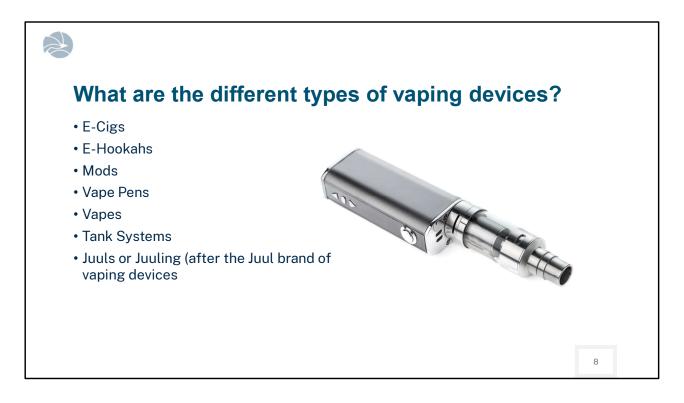
That sensor triggers the heater which burns the contents of the cartridge which contains nicotine or some other substance.

A tiny computer chip, or microprocessor, controls the heater and sensor.

A battery – which can be rechargeable – powers the whole thing and the LED light at the end of the e-cigarette recreates the idea of a lit cigarette.



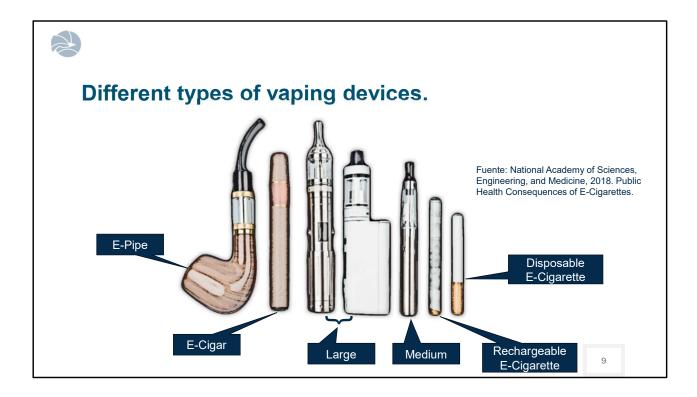
So – we said there are different types of vaping devices.



#### [ASK QUESTION & GET RESPONSES, THEN CLICK]

Here is a list of vaping devices. They are all a bit different, but work in a similar way: the device heats a liquid or dry substance to create a vapor, which is then sucked into the lungs.

What are other names you have heard them called?



Here are some images of vaping devices.

This is a pretty generic image. Vapes come in all colors, shapes and sizes, often designed to attract young people.



# What substances can be used in a vaping device?

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Ok – If you have heard of vapes or e-cigarettes before, you may think that they are used for nicotine. And some are, but there are many different substances that can be used in a vape.



# What can be used in a vaping device?

- Vapes were originally marketed as an alternative to cigarettes (and used similar advertising), so many vapes contain nicotine.
- Vapes can also be used to consume marijuana concentrates and other cannabis-related products (THC, CBD, Delta-8) ...





Source: Business Insider, The New E-Cigarette Ads Look Exactly Like Old-School Cigarette Promos, 11/5/2013

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The most common is still nicotine. Vapes were originally marketed as an alternative to cigarettes and a way to quit smoking.

It is interesting that ads for e-cigarettes a decade ago looked like updated versions of cigarette ads from a century ago.

But substances other than nicotine can be put into a vape, including marijuana concentrates and other cannabis-related products.



# What can be used in a vaping device?

- Marijuana concentrates are increasingly being used in vaping devices. Many users prefer the vaping device because it is smokeless, sometimes odorless, and is easy to hide or conceal.
- The user takes a small amount of marijuana concentrate, referred to as a "dab," then heats the substance using the vaping device to produce vapors that ensure an instant "high" effect for the user ("dabbing").





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Marijuana concentrates are exactly what they sound like: The active ingredient in marijuana is concentrates in a substance called a "dab" that can be burned in a vape.

[OMIT SLIDE IF YOU THINK IT MAY BE EDUCATIVE (ESP. FOR YOUNGER AUDIENCE).]





# The Risks of Vaping

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Vaping – whether it is nicotine, marijuana concentrates, or some other substance, has dangers that you – and the people you care about -- need to be aware of.



## The Risks of Vaping

- Vapes that do not contain nicotine, marijuana, or another substance that affects the brain can still be dangerous.
- A chemical -- vitamin E acetate -- has been connected to EVALI, which stands for E-cigarette or Vaping product use Associated Lung Injury, which can cause death.
- Researchers found toxic metals in vapes.
- More than 2,000 explosion and burn injuries resulted in visits to hospital emergency departments from 2015 to 2017.



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One thing a young person may say is that they are not vaping nicotine or other drug – they are just vaping flavors.

Even if that is true, there is more risk than they may think.

A chemical found in some vapes has been associated with lung injury.

Researchers have found toxic metals in vapes.

And between 2015 and 2017 more than 2000 people went to the emergency room due to vape explosions and burn injuries.

#### Vitamin E

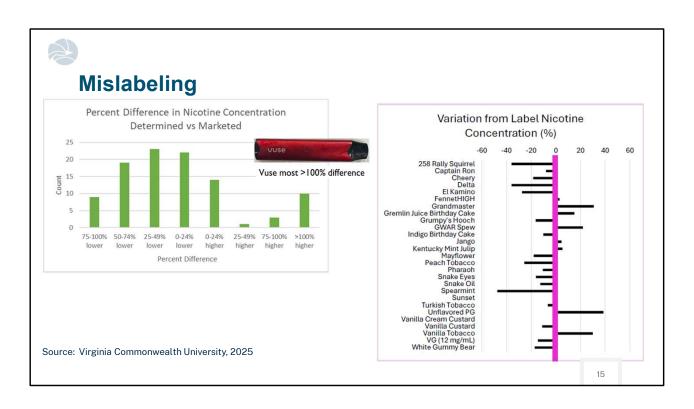
Vape Flavors and Vape Juice: What You Need to Know | Johns Hopkins Medicine

https://publichealth.jhu.edu/2024/researchers-find-toxic-metals-in-e-cigarettes

Mason report finds e-cigarette explosions, injuries are more common than previously thought | George Mason University News

https://content.sitemasonry.gmu.edu/news/2018-09/mason-report-finds-e-cigarette-explosions-injuries-are-more-common-previously-thought

https://www.cnn.com/2019/06/19/health/e-cigarette-vape-explode-teen-study



One often unrecognized issue when it comes to vaping is the fact that many vapes are mislabeled: some have more nicotine than marketed, some have less.



In addition to mislabeled pods and cartridges, the vast majority or e-cigarette sales are for illegal products.

The FDA has authorized only 34 e-cigarette products for sale, which constitute less than 14% of the market.

U.S. retail sales data show 86% of e-cigarette sales are for illegal products --

https://truthinitiative.org/research-resources/tobacco-industry-marketing/us-retail-sales-data-show-86-e-cigarette-sales-are



It's not easy to tell the difference between authentic, regulated vapor products and blackmarket vapor products. Sometimes it can be nearly impossible. Here are a few signs that the vapor product may be "fake."

Strange particles or foreign materials in the product

Packaging or labeling that seems off-kilter, lacking, or containing errors such as misspellings

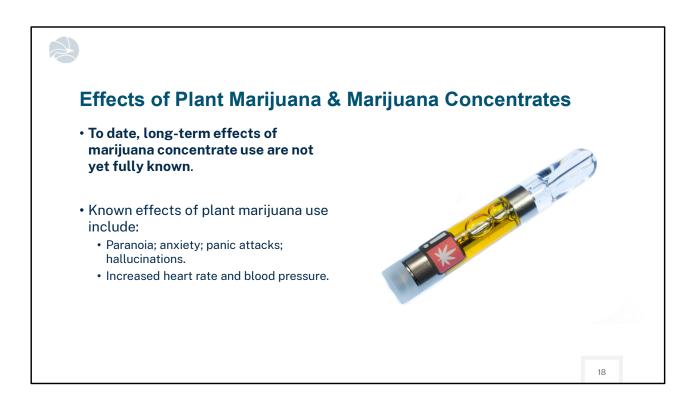
Products that have been tampered with or are tainted

Pricing that is unusually lower than market value

Products that have been purchased from unauthorized retailers or third-party online marketplaces

Products that are no longer commercially available from the manufacturer or illegal in the jurisdiction where they are sold

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And the reality is that vapes and marijuana concentrates have not been around long enough to determine what the long-term consequences may be.





#### **Contamination**

- Some states that allow marijuana to be sold also screen for up to 66 pesticides, yet there are thousands of other unauthorized chemicals that growers or processors use.
- "When you concentrate your flower cannabis into a concentrate, most pesticides come over and concentrate during that same procedure."
- Synthetically manufactured THC goes through a chemical process that leaves behind dangerous residues. About a quarter contain a corrosive, toxic chemical similar to sulfuric acid.

Source: Josh Swider, CEO of Infinite Chemical Analysis Labs, a company that chemically evaluates marijuana products in all forms 2/4/2025 NPR interview

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#### [SKIP IF NOT AGE APPROPRIATE]

Early in 2025, NPR reported on contamination of marijuana plants. When marijuana is concentrated, the contaminants are concentrated too.

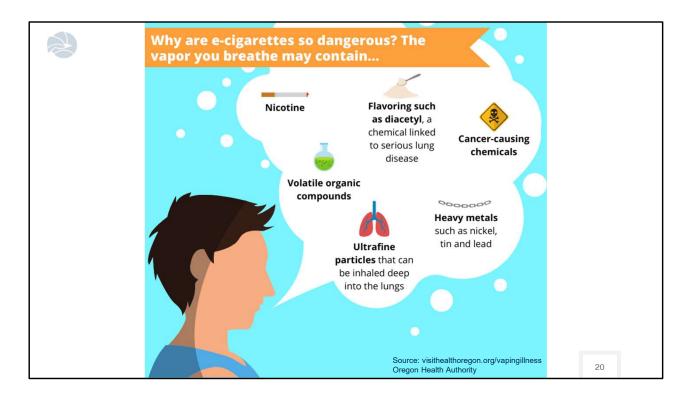
Vaping weed is popular, but there are many unknowns about its safety: NPR

Josh Swider, CEO of Infinite Chemical Analysis Labs, a company that chemically evaluates marijuana products in all their forms

Some states that allow marijuana to be sold also screen for up to 66 pesticides, yet there are thousands of other unauthorized chemicals that growers or processors use.

"When you concentrate your flower cannabis into a concentrate, most pesticides come over and concentrate during that same procedure."

Synthetically manufactured THC goes through a chemical process that leaves behind dangerous residues. About a quarter contain a corrosive, toxic chemical similar to sulfuric acid.



This chart sums up the ways in which e-cigarettes are dangerous.





# How can you deal with stress in healthy ways?

- How do you address those moments of anxiety, depression, anger, etc.?
- What are ways to deal with hard situations that ARE NOT vaping?
- Do you have a trusted adult in your life? It can be an aunt, uncle, parent, teacher, mentor. Find someone you can confide in, it helps.
- Do you talk to your school counselor? They are a resource for you too.



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[ASK QUESTION: How can you deal with stress in healthy ways?, THEN CLICK]

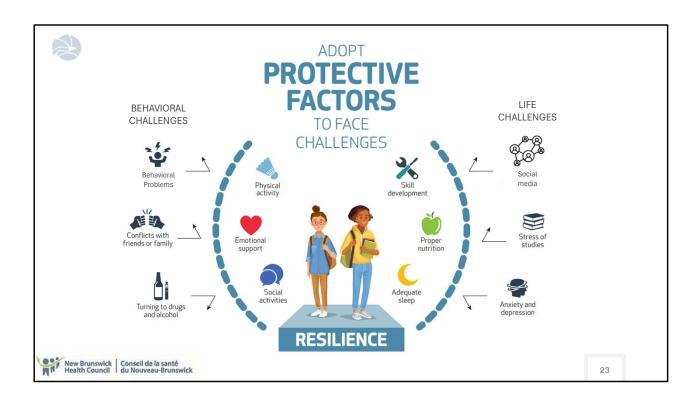
Ask yourself, do you have ways you address those moments of anxiety, depression, anger, etc.?

What are your coping mechanisms that ARE NOT vaping?

Do you have a trusted adult in your life? It can be an aunt, uncle, parent, teacher, mentor. Find someone you can confide in, it helps.

Do you talk to your school counselor? They are a resource for you too.

ADOBE#: 237785065



Everyone deals with challenges in their life. (Even if it looks like their life is perfect from the outside.)

Some are behavioral challenges – some are life challenges.

Protective factors you can take include physical activity, emotional support, social activities, good sleep and proper nutrition.

It can also help to build skills so that you are ready to respond when you are faced with a tough situation.

QUESTION: WHAT MAKES SENSE AND DOESN'T ABOUT THIS CHART?



If you have already started vaping, "This is Quitting" is a program that can help you stop.





# **Talking about Vaping**

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So – How do you talk with a friend you care about, or family member, about vaping?



# Friends can protect friends from vaping

- One way to keep a friend from using is by not using yourself. Young people are more likely to vape when their friends do.
- You can help a friend stop vaping if they want to.
- You can share your concern for a friend.



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It is important to know that you can influence your friends. Young people identify peers as a reason to use – they are also a reason not to use.



It is our hope that now you understand that you as young people and your friends are being targeted by companies that want you to vape as much as possible for as long as possible. The more you vape, the more money they make.

Vaping is dangerous in itself and can lead to the use of other substances.

That knowledge can protect you, but you can also use it to protect people you care about. Here is what you can say:

The first thing I would tell a friend is "You Matter." Whatever stress or isolation or anger or upset you may feel, your life affects other people's and their life would be worse if you're not in it. Your future can make other people's better.

The next thing I would say is that the risks are real. Substance use has never been healthy. There have always been dangers of addiction or bad decisions.

But today's drug supply is toxic and taking the lives of too many young people.

Third, if you need help; get help. Whether it is [a teacher or a school nurse or a coach / another parent or a doctor or a community organization] start looking and you will find people who want to help. Sometimes pride or fear can keep us for asking for help. Don't let it. If all else fails, dial 988. It is a free national service from the federal government that can connect you with services that can help.

Finally, you can give help. That may mean having a tough conversation to say you are worried; or it could be getting trained to provide support to peers; or it could mean carrying naloxone. There is something that all of us can do to save the lives of people in our world.



## Ask open-ended questions

- Open-ended questions are questions that can't be answered with a simple "yes" or "no" or other short answer.
- · Avoid "why" to prevent defensiveness.
- Examples:
  - "What do you think you will do?"
  - "What's the next step?"
  - "What do you think has to change?"
  - "What are your options?"
  - "Of the things we have mentioned here, what seems to make sense?"
  - "Tell me more about what you'd like to do."
  - "How do you think you want to handle this?"

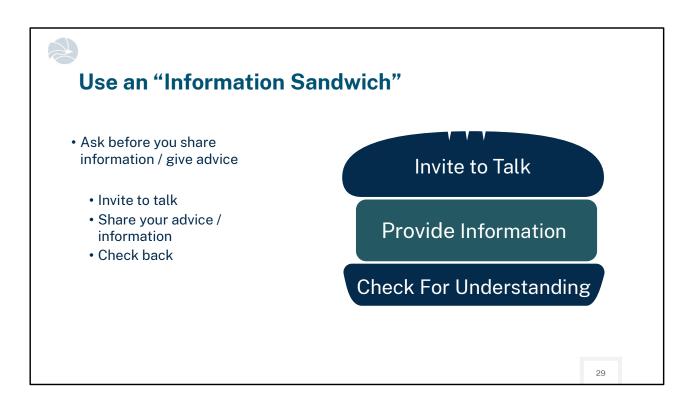
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So – how do you have helpful conversations? That is – literally – a whole presentation by itself, but today we'll talk about two tools you can use.

The first is open-ended questions. [ASK WHO HAS HEARD OF OPEN-ENDED QUESTIONS & WHAT THE AUDIENCE THINKS THEY MEAN]

Very simply, open ended questions are questions that can't be answered with a simple "yes" or "no" or other short answer.

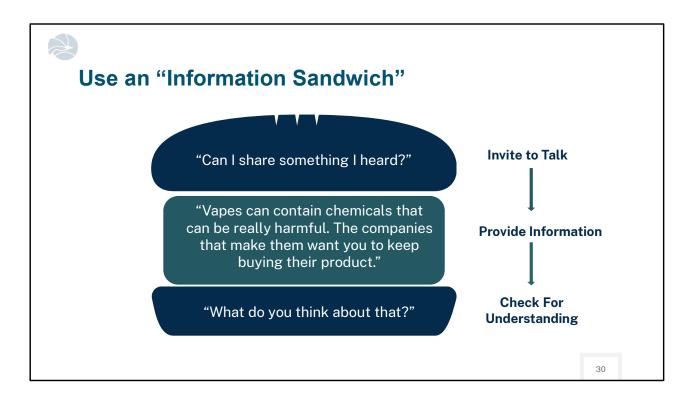
There are a bunch of examples here. What I would suggest is when you want to have an important conversation, think about the questions you want to ask and take some time to turn them into open-ended questions.



The next tool is the information sandwich.

If there is an idea or some facts that you want to share, the information sandwich is a great tool to visualize and use.

The first part is an invitation to talk; the middle is the information you want to provide; and the third part is checking back to make sure things make sense and – hopefully – continue the conversation.



So, here is an example...

#### [CLICK THROUGH AND READ EXAMPLE]

So, let's break this down ... "Can I share something I heard?" is "asking permission," or an "invitation to talk." That moment may not be a good time to talk, and that's ok. Find a better time.

The "information" you are providing are facts about vaping.

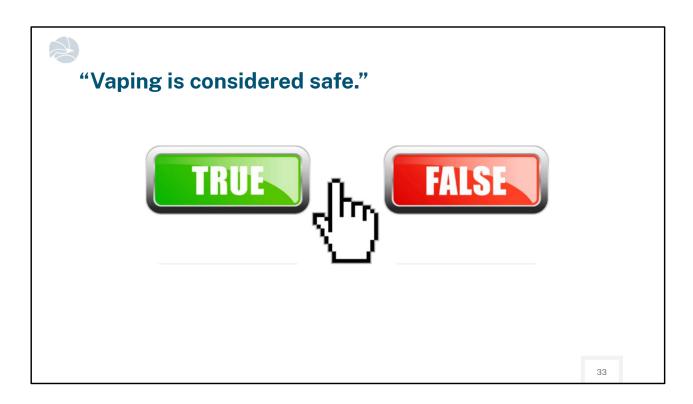
"What do you think about that?" is a way to "check for understanding." You may not get a response you like, but that's ok. It is better to get an open conversation going where you can share more information and work through any attitudes or information that could be risky.



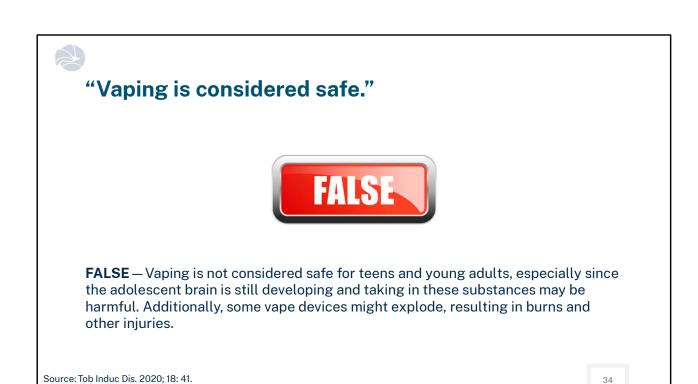
 $\mathsf{Ok}-\mathsf{now}$  it is time to show what you know about vaping!



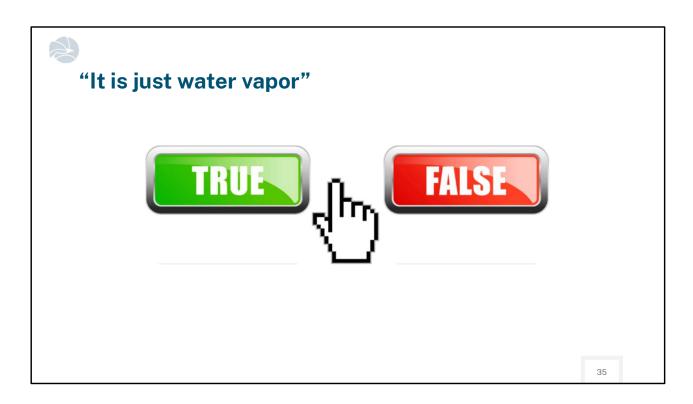
Quiz show!

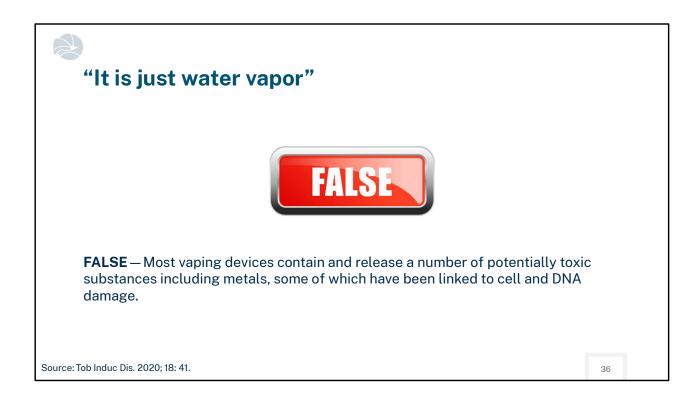


[Present statement to audience]



That's an easy one. Vaping is not considered safe for teens and young adults. No level of use is safe.





No – even vapes that do not contain nicotine, cannabis, or another psychoactive substance can still be dangerous.





This is true and false. While adults may be able to reduce smoking by vaping, young adults are more likely to smoke cigarettes when they start vaping.





#### "If it is sold in a store, it must be safe."



**FALSE** – The Food and Drug Administration has authorized 34 products, sold by three companies.

Between January 2024 and June 2024, the total number of e-cigarette products sold in the U.S. reached 6,287 products.

FDA also states that vaping is not safe for youth.

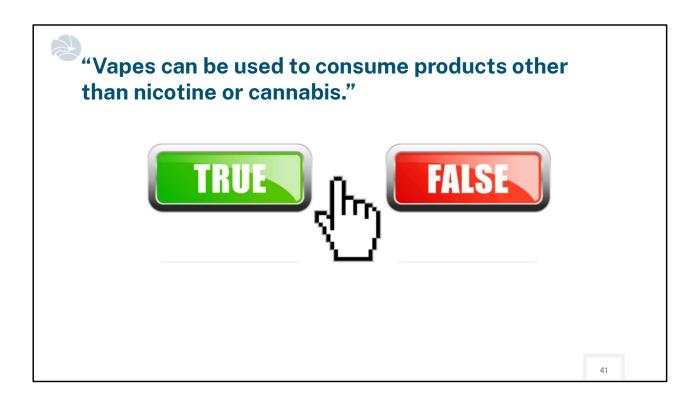
Source: tobaccomonitoring.org

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To date, <u>FDA has authorized 34 tobacco- and menthol-flavored e-cigarette products and devices</u>. These products have undergone rigorous scientific review, including toxicologic assessments, and have been found by FDA to meet the statutory public health standard.

However, FDA also states: While e-cigarettes can generally be a lower-risk alternative for adults who smoke cigarettes, the use of e-cigarettes is not risk-free. These products deliver harmful chemicals and contain nicotine, which is highly addictive. Moreover, given the harmful chemicals found in e-cigarettes, further high-quality research on both short- and long-term health outcomes is needed.

https://www.fda.gov/tobacco-products/products-ingredients-components/e-cigarettes-vapes-and-other-electronic-nicotine-delivery-systems-ends







**TRUE** – A 2024 study found that vapes are used to consume opioids, cocaine, synthetic cannabinoids, cathinones (K2/Spice), hallucinogens, MDMA (Ecstasy) and methamphetamine.

Alcohol can also be vaped, which can lead to intoxication and harm.

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Substances other than nicotine or cannabis are definitely being uses in vaping devices.

<u>Electronic cigarettes are a tool to vape illicit drugs | Discover Public Health</u> -- https://www.researchgate.net/publication/383566493\_Electronic\_cigarettes\_are\_a\_tool\_t o\_vape\_illicit\_drugs

<u>Inhaling alcohol vapour or mist: An international study of use, effects and harms – ScienceDirect – </u>

https://www.sciencedirect.com/science/article/abs/pii/S0955395920302590







**TRUE** – A study by researchers at Columbia University Mailman School of Public Health of more than 50,000 U.S. adolescents indicates that vaping nicotine is strongly linked with an increased likelihood of high levels of binge drinking and cannabis usage.

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Unfortunately, that is true,

<u>Is Vaping New Gateway Into Further Substance Use? | Columbia University Mailman School of Public Health</u>







**TRUE** – According to CDC, parents and caregivers can protect their children by modeling non-use of vaping devices; making their home tobacco-free; talking to their child about the risks of vaping and helping them quit if they start.

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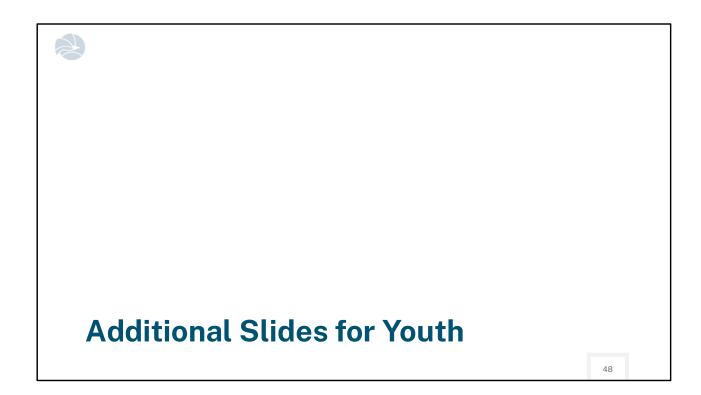
Parents and caregivers can play a key role in protecting the young person they care about by modeling healthy behavior and communicating with their child about the risks of vaping and addressing motivations to vape.

https://www.cdc.gov/tobacco/e-cigarettes/protecting-youth.html#:~:text=Parents%20and%20caregivers,smokefree.gov%20for%20more%20help

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Visit  $\underline{www.justthinktwice.gov}$  to keep learning more about vaping and how to help keep you and your friends safe



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# My Vaping Mistake: How it affected by mental health

• My Vaping Mistake: How it affected my mental health | AwesomenessTV

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# **PSA**

• Persuasive Communication: Anti-Vaping PSAs | KNOW VAPE | PBS LearningMedia

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### **Contact Us**

#### **DEA Community Outreach & Prevention Support**

Call us: 202.307.7936

Email us: <a href="mailto:community.outreach@dea.gov">community.outreach@dea.gov</a>

Online: www.dea.gov/education-prevention/community-outreach



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The webpage provides more information about DEA Community Outreach's work and the QR code links to all of DEA's publications.