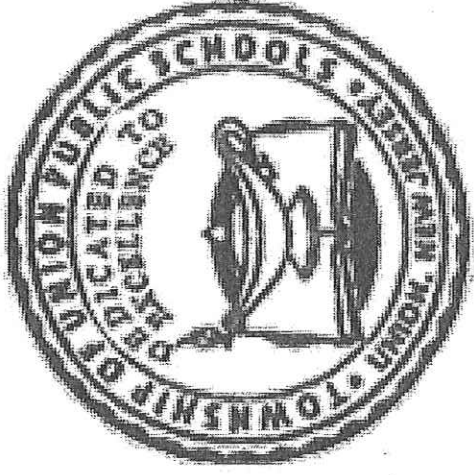


**TOWNSHIP OF UNION PUBLIC SCHOOLS**



# **Grades 11/12 Vaping Prevention Resource Guide**

Adopted May 2021

### **Mission Statement**

The mission of the Township of Union Public Schools is to build on the foundations of honesty, excellence, integrity, strong family, and community partnerships. We promote a supportive learning environment where every student is challenged, inspired, empowered, and respected as diverse learners. Through cultivation of students' intellectual curiosity, skills and knowledge, our students can achieve academically and socially, and contribute as responsible and productive citizens of our global community.

### **Philosophy Statement**

The Township of Union Public School District, as a societal agency, reflects democratic ideals and concepts through its educational practices. It is the belief of the Board of Education that a primary function of the Township of Union Public School System is to formulate a learning climate conducive to the needs of all students in general, providing therein for individual differences. The school operates as a partner with the home and community.

Course Description

Curriculum Units/Pacing Guide

Unit # / Mapping Prevention	Number of Days
Unit 1: One unit/4 lessons	over 4 weeks
Unit 2:	
Unit 3:	
Unit 4:	

## Standards Overview

Overview	Standards	Unit Skills Focus	Content-Specific Practices (when applicable)
<b>Objective 1</b> <b>Title - Lifestyle choices-</b> All students will acquire health promotion concepts and skills to support a healthy, active lifestyle.	2.1.8.A.1-4 2.1.12.A.1-2	Analyze the role of personal responsibility in maintaining and enhancing personal, family, community, and global wellness.	See handouts provided with specific lesson plans and activities.
<b>Suggested Resources</b> <i>Provide links to specific resources/activities</i>			
<b>Objective 2</b> <b>Title - Challenging perceptions</b>	2.2.4.B.3 2.2.12.B.4	Recognize the impact of vaping on individuals, families, peers and society.  Develop new and improved strategies to prevent initiation to vaping.  Evaluate the impact of individual and family needs on the development of a personal wellness plan and address identified barriers.  Predict the short and long term consequences of good and poor decision making on oneself, friends, family members and community.	
<b>Suggested Resources</b> <i>Provide links to specific resources/activities</i>			
<b>Objective 3</b> <b>Title - Health behaviors and consequences/decision making</b>	2.3.12.B.1-5	Compare and contrast the incidence and impact of commonly abused substances along with vaping, on individuals within the community and across the USA and globally.	

		<p>Debate the legal and financial consequences for the use, possession, and sale of vaping products.</p> <p>Correlate the use of vape products with overall life satisfaction.</p> <p>Differentiate between facts and fiction with regard to vaping advertising.</p> <p>Analyze the effectiveness of various strategies that support an individual's ability to abstain from vaping.</p>	
<p><b>Suggested Resources</b> Provide links to specific resources/activities</p>			
<p><b>Objective 4</b> Title- Health goals</p>	<p>2.2.8.B.1-3 2.3.6.B.2-4</p>	<p>Predict how the outcome of a health-related decision may differ if an alternative decision is made by self or others.</p> <p>Predict social situations that may require the use of decision making skills regarding vaping.</p> <p>Assess the risk in a variety of situations and identify strategies to reduce intentional and unintentional risk to self.</p>	
<p><b>Suggested Resources</b> Provide links to specific resources/activities</p>			



## Grade 10 Sample Lesson Plan: Unit 20 – JUULs Not Cool

### SOLs

- 10.1M Identify health-related social issues such as substance use (vaping).
- 10.3 N Identify and create a plan to address a community health-related social issue such as substance abuse (vaping).

### Objectives/Goals

- The student will demonstrate an understanding of health concepts and teen behaviors when it comes to vaping and using products such as JUULs.
- The student will advocate for improving personal, family, and community health.
- The student will use accurate peer and societal norms to formulate a health-enhancing message.

### Materials

- [JUULs Not Cool slideshow](#)
- [Health Advocacy Campaign - Vaping](#)

### Procedure

#### Step 1

- Hook - Show students the [Vape Rap](#) music video by 2015 National Health Teacher of the Year, Andy Horne - It will get your students engaged and thinking about the topic for the lesson.
- Instant Activity - After the song, have students do a Think-Pair-Share activity by proposing to the class the following questions:
  - *What is vaping? Vaping describes someone who uses an e-cigarette – a battery- powered inhaler – that is designed to mimic traditional cigarette smoking. E- cigarettes are devices that use a cartridge to deliver an aerosol mist containing nicotine with various flavors. This aerosol mist is commonly called a “vapor”.*
  - *How many high school students do you think vape (or use E-cigs) across the country and/or in the state of Virginia? Refer to the 2017 YRBS data from the CDC below.*

### References

- Health Advocacy Campaign - Vaping
- JUULERS against JUULS - <https://www.youtube.com/watch?v=7EsNG7RcStQ>
- ABC News Nightline - *Juuling: What is the trendy vape pen becoming popular among teens* [https://www.youtube.com/watch?v=EmjVU\\_jZYV0](https://www.youtube.com/watch?v=EmjVU_jZYV0)
- Andy Horne, 2015 National Health Teacher of the Year

### Handout

The next page includes a handout for the lesson. The handout is designed for print use only.

- <https://infogr.am/>
- <http://piktochart.com/>
- <http://canva.com/>

### Option 3: Advocacy Podcast

- You will write a script and record a 1-2 minute podcast on vaping.
- Your podcast should advocate for healthy norms and behaviors and target teenager and/or parents.
- You must have information from societal norms (i.e. YRBS data from CDC)
- Research and include valid information in your podcast, cite at least one source
- Your podcast should have basic music in the intro and outro....possibly in between transitions.
- Include one catchy slogan to help people remember your message
- You might want to use Garageband or Audacity to record your podcast.

#### Learning Targets:

Analyze personal susceptibility to injury and illness if engaging in unhealthy behaviors, *such as using electronic vapor products.* (1.12.8)

Use accurate peer and societal norms to formulate a health-enhancing message *in regards to electronic vapor products.* (8.12.1)

Adapt health messages and communication techniques *about using vapor products,* to a specific target audience (8.12.4)

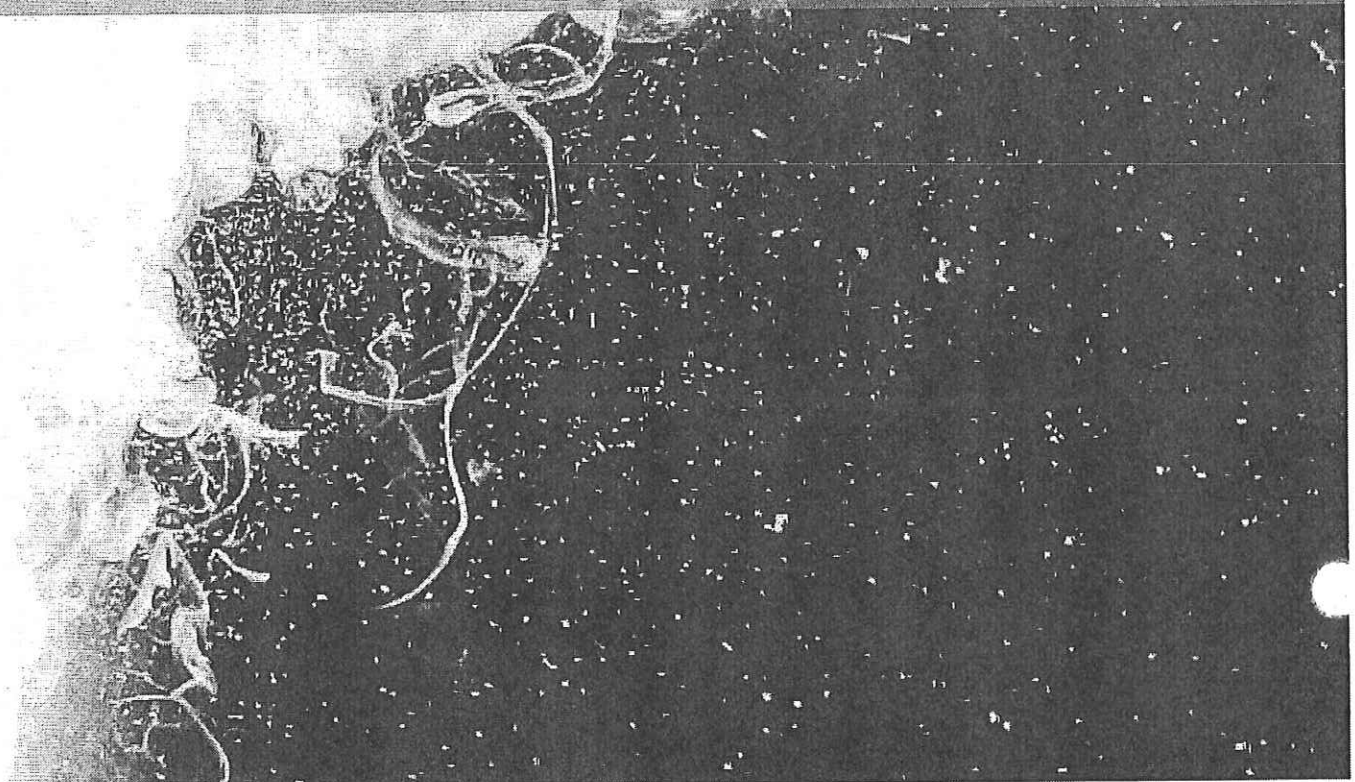


Reflection for Improvement:

*D.A.R.E.*

# High School Vaping Lesson

Student Handout



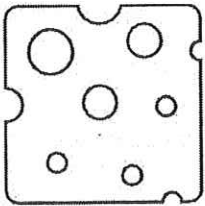
# High School Vaping Lesson Student Handout

Swiss Cheese Model of Addiction Video: <https://youtu.be/SuflpGPauI>

- Cheese slices are your protective layers, or defenses
- Holes in the cheese are your risks, or weak spots
- Building up healthy habits strengthens, or is protective – like adding a slice of cheese
- Participating in risk behaviors is like increasing the size of the holes

Write down one personal protective factor and one risk for each slice:

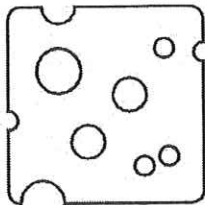
## Genetic/Biological



Protective: .....

Risk: .....

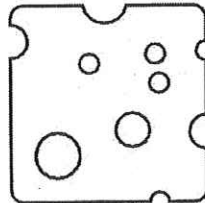
## Brain/Mental Health



Protective: .....

Risk: .....

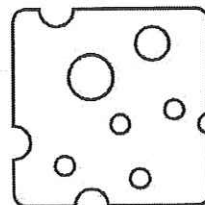
## Family/Social Environment



Protective: .....

Risk: .....

## Physical Environment



Protective: .....

Risk: .....

# High School Vaping Lesson Student Handout

## Activity 4: Vaping Timeline

In the early 2000's, the technology to effectively vaporize nicotine became available for commercial use, and the first "e-cigarettes" began to be produced. In 2011, the Food and Drug Administration (FDA) determined that they would regulate e-cigarettes like traditional cigarettes under the Food, Drug, and Cosmetics Act. By 2012, most large tobacco companies had introduced e-cigarette devices, modified devices became more common, and they wanted people to believe they were safe. In 2015, JUUL devices became available to consumers and were introduced with a massive advertising push – some say aimed at young people...

What happened next?

2016	
2017	
2018	
2019	

## Activity 5: Journal Questions

What vaping risks are you most concerned about?

.....  
.....

What is your reason not to vape?

.....  
.....

# Vaping and E-Cigarettes: Are they Safe?

## Brief Description

This lesson explores Electronic Cigarettes, one type of Electronic Nicotine Delivery System (ENDS). The media suggest e-cigarettes are a safer way to use nicotine than conventional cigarettes because there is no smoke or tar. This lesson will explore whether or not e-cigarettes are safe, what is known and not known about the chemicals they contain, similarities and differences between e-cigarettes and conventional cigarettes, and how ENDS are regulated.

**Duration of the lesson:** 90 min. or two 50-minute periods

## Learning Objectives

- 2.3 Understands the concepts of prevention and control of disease
  - 2.3.2 Analyzes personal health practices, and how they affect non-communicable diseases
- 3.1 Understands how family, culture and environmental factors affect personal health
  - 3.1.2 Analyzes how environmental factors affect health
  - 3.1.3 Evaluates environmental risks associated with certain occupational, residential, and recreational choices.

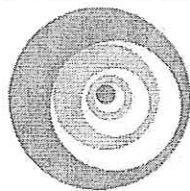
## Materials

- E-Cigarette Fact Sheet
- Question and Answer worksheet

## Resources

*Is Vaping Safer than Smoking?* [www.Youtube.com/riskbites](http://www.Youtube.com/riskbites)

FDA, CDC, National Institute of Drug Abuse federal government and American Lung Association websites (urls on the next page)



## Electronic Cigarettes

### What are e-cigarettes?

Electronic cigarettes, also known as e-cigarettes or e-cigs, are battery-powered devices designed to look like and be used the same way as conventional cigarettes.

Unlike conventional cigarettes that burn tobacco and release nicotine into the smoke, e-cigarettes heat up a liquid that contains nicotine and release it as an aerosol. A cartridge in the e-cigarette dispenses the "e-liquid". Another ingredient, propylene glycol, produces the aerosol, which is stored under pressure. When a button is pressed, the aerosol is released as a fine spray. Nicotine, nicotine-free, and flavored e-liquids are available.

E-cigarettes were invented in China in 2003. Sales have grown rapidly in spite of questions about safety, effectiveness to help smokers quit, impact on public health, and lack of regulation by the US government. The FDA began regulation e-cigarettes in Aug, 2016.

### What is vaping?

Vaping means using e-cigarettes. Vaping copies the experience of smoking a cigarette by delivering vapor or aerosol to the lungs. The aerosol contains nicotine, propylene glycol, glycerin, and various compositions of flavorings.

### Is vaping safe?

Since the US Food and Drug Administration (FDA) only began to regulate e-cigarettes in 2016, clinical studies for safety are not completed. Consumers have no way to know whether the devices are safe. The chemicals and their concentration in the e-liquid, and the dose of nicotine, were not regulated before 2016.

We do know that the amounts of nicotine, propylene glycol, and other ingredients in different brands of e-cigarettes vary widely. It is difficult to accurately measure the ingredients and by-products from heating the vaping solution. With FDA regulation, manufacturers will have to state the ingredients and how much nicotine the e-liquid contains.

The air concentrations of nicotine from different brands of e-cigarettes have been found to be about 1/10th the concentration of secondhand nicotine from smoking cigarettes. However, using e-cigarettes indoors may expose others to nicotine. One study found that e-cigarettes produce second-hand exposure to nicotine

but not to the toxins from burning that are produced by cigarettes.

Many Public Health officials agree that e-cigarettes are safer than smoking conventional cigarettes. However, research shows that smokers who switch to vaping do not tend to quit, or to give up nicotine.

Health effects of using nicotine include addiction, high blood pressure, and, later in life, coronary heart disease and cardiovascular problems. Inhaling propylene glycol and glycerol irritates the mouth and throat and causes a dry cough. These ingredients in the liquid solution will be studied for the health effects of inhaling the vapor into the lungs.

Also, nicotine can cause poisoning, especially for children. According to the World Health Organization, if a child swallows the e-liquid in a 24 mg e-cigarette cartridge, it would probably die. Nicotine is especially dangerous to youth, pregnant and nursing women, people with heart conditions, and the elderly. E-cigs may increase nicotine addiction among young people and lead them to try other tobacco products.



### What about vaping hash oil?

Hash oil is concentrated *tetrahydrocannabinol* (THC), the psychoactive ingredient in marijuana. Hash oil is extracted from cannabis buds using liquid butane.

Vaping hash oil is another way to use marijuana. However, butane is extremely flammable and can explode. Buildings have caught fire and people have been burned when cannabis buds and butane blew up in their faces. School and public health officials are concerned about young people extracting hash oil and repurposing e-cigarettes to vape hash oil.

# E-Cigarettes Question & Answer Worksheet

Read and annotate the *Fast Facts about Electronic Cigarettes* factsheet.  
Write the 3 questions you have about electronic cigarettes:

1.

2.

3.

---

My Research Question:

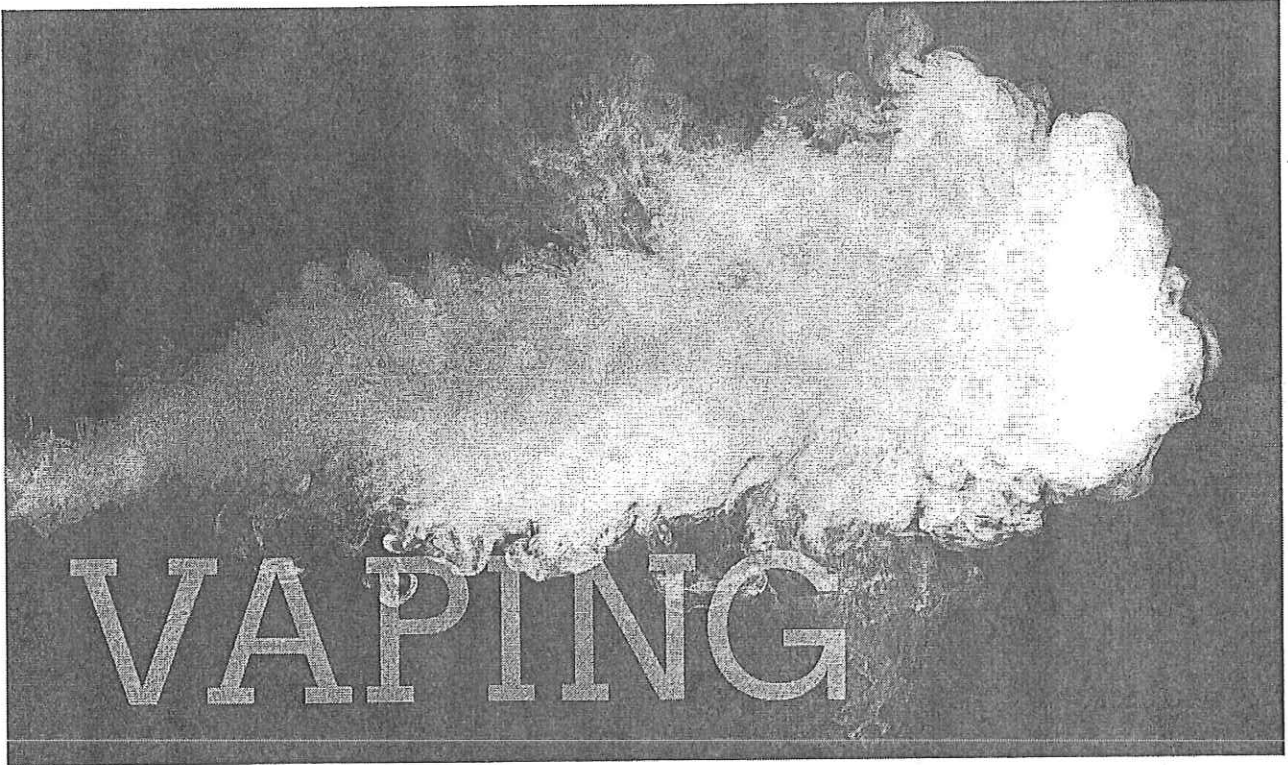
My name:

Partner's name:

My research & notes (continue on back of page):

Sources:

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# What You Need to Know And How to Talk With Your Kids About Vaping



# Introduction

Although it has been around for over a decade, vaping’s popularity exploded in 2017, taking many families, schools and healthcare providers by surprise. Vaping, or Juuling as it is often referred to by teens and young adults (named after a popular vape device called JUUL), is the inhaling and exhaling of an aerosol produced by using a vape device.

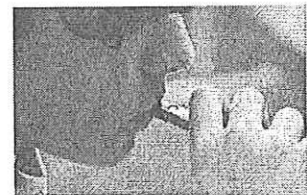
According to the University of Michigan’s 2017 Monitoring the Future study, nearly 1 in 3 high school seniors tried vaping in the past year. With advertising geared toward teens and young adults, brightly colored vape pens and thousands of flavors to choose from, the expectation is that growth will continue. Some estimate that the market will be worth over \$60 billion by 2025.

For every story or article touting the benefits of vaping, there are an equal number raising concerns about the risks of vaping, especially for teens and young adults. This guide is intended to help you understand what vaping is, its appeal to youth and what research has to say about both the risks and unknowns, due to the lack of long-term vaping studies. We’ve identified some signs to look for and what to do if you are concerned that your child may try or actually is vaping. Lastly, we offer some advice on what to say when talking with your child about vaping.

## What Is in This Guide?

What is Vaping? .....	3
How Does Vaping Work? .....	3
What Do Vape Devices Look Like? .....	3
What Is Being Vaped? .....	3
What Is Vaping’s Appeal? .....	4
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What Are the Signs of Vaping? .....	8
What Can Parents Do to Safeguard Against Vaping? .....	9
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Resources.....	12

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Teen using a JUUL

**Nearly 1 in 3**  
high school  
seniors tried  
vaping in the  
past year.

Monitoring the Future, 2017

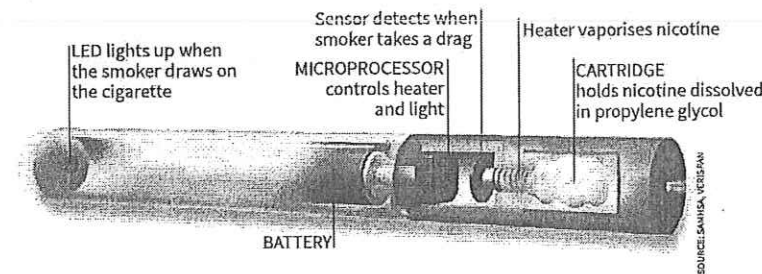
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## What is Vaping?

Vaping is the act of inhaling and exhaling aerosol or vapor produced by a vape device. Because of the rise in popularity of JUUL, a specific type of vape device, many teens and young adults use the term “JUULING” (pronounced Jewelring), instead of vaping.

## How Does Vaping Work?

Vape devices, known as *e-cigs*, *e-hookahs*, *mods*, *vape pens*, *vapes*, *tank systems* and *Juuls*, contain 4 basic components: a cartridge or a tank to hold e-liquid (or e-juice/vape sauce), a heating element known as an atomizer, a battery and a mouthpiece to inhale.



A sensor detects when a person is trying to inhale. This triggers the battery to supply electricity to the coil of wire or the atomizer. The heat given off by the coil is transferred to the e-liquid, which can only take so much energy before it's vaporized, and this is what users inhale. While the output of the devices may look like smoke, it is actually vapor.

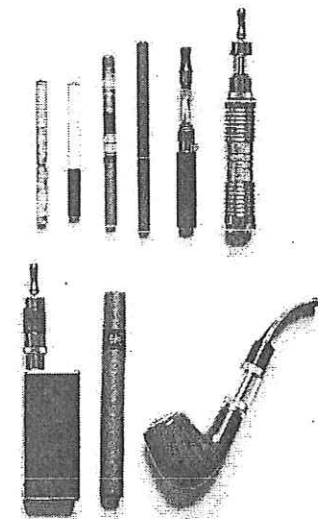
## What Do Vape Devices Look Like?

Some vape devices look like regular cigarettes, cigars or pipes while others resemble USB sticks and other everyday objects like a guitar pick. Larger devices such as tank systems, or “mods,” do not look like other tobacco products. Instead, they look more like a small cellphone. Some devices can be thrown away, while others can be reused by charging the device on the USB port of a computer or elsewhere and replacing the e-liquid, either by filling the chamber or using a self-contained pod.

## What Is Being Vaped?

Although many substances can be vaped, three are most common: flavored e-liquids, flavored e-liquids with nicotine, and marijuana. The e-liquids come

Vape devices can look like regular cigarettes, cigars or pipes, while others resemble USB sticks, guitar picks and a small cellphone.



Vape pens generally are available for \$20 and up. Current pricing for the JUUL starter kit is \$49.99, which includes the device, a charger, and 4 flavored pods.

in small bottles or in pre-filled pods or cartridges. Pods are the component that contain the e-liquid.

1. Flavored e-liquids come in thousands of flavors, including bubble gum, cotton candy and grape, but also hot dog, banana bread and King Crab legs.
2. Flavored e-liquids may also contain different levels of nicotine, ranging from 2mg/ml to 59mg/ml. One of the more popular vape devices, Juul, contains 59mg/ml of nicotine in each pod. Each Juul pod is equal to one pack of cigarettes.
3. Marijuana can be vaped in both the leaf form or using THC and/or CBD oil. THC is the psychoactive compound in marijuana that creates a sense of being high.



Flavors are one of the biggest attractions for vaping.

## What Is Vaping's Appeal?

Although vaping was intended to be a less harmful option for adult smokers, teens and young adults have embraced it for several reasons. First and foremost is a sense of curiosity, followed by the many kid-oriented flavors offered.

It's not uncommon for kids to try out each other's vapes at parties to check out flavors like German Chocolate Cake or Banana Split and then post vaping videos on social media.

Teens are increasingly becoming interested in "cloud competitions," in which adults compete to perform the best vaping tricks. In addition to being featured on social media, cloud competitions are becoming a regular feature at local vape shops with some offering thousands of dollars in prize money.



Vaping tricks are another major attraction of vaping.

Boredom is another reason cited by many teens. It can be habit-forming, much in the same way teens check their phones in free moments. It's easy to take a quick puff.

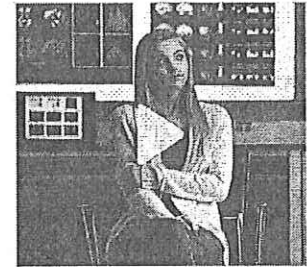
.....  
Each Juul pod contains 59 mg/ml of nicotine, **equivalent to one pack of cigarettes.**  
.....

.....  
Cloud competitions are becoming a regular feature at local vape shops with some offering **thousands of dollars in prize money.**  
.....

# Is Vaping Safe?

The short answer is that vaping isn't considered safe for teens and young adults, especially since their brains are still developing. Vaping is a relatively new phenomenon. As a result, long-term studies that examine its impact on teen and young adult health and behavior have yet to be concluded.

The most comprehensive research to date is a report commissioned by Congress from the National Academies of Sciences, Engineering and Medicine. Released in January 2018, the report looked at exposure to nicotine and other toxic substances, dependence, harm reduction, smoking risks, cancer and more. Below is a summary of their findings, based on "conclusive" or "substantial" evidence.



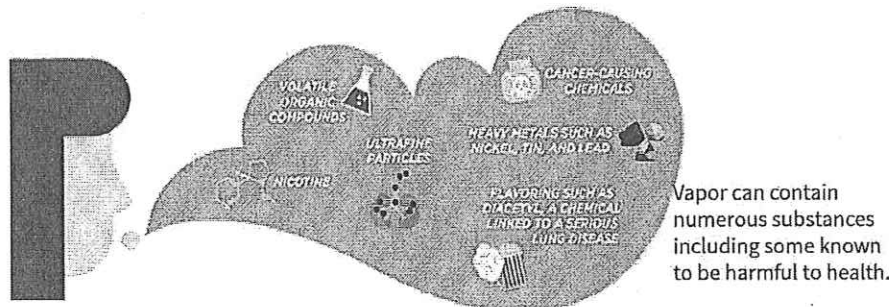
Is vaping safe? Watch this short video from the CDC.

## ⚠️ Exposure to Nicotine

Nicotine is a stimulant that activates the nervous system to prepare the body for physical and mental activity. It causes one's breathing to become more rapid and shallow, as well as increases heart rate and blood pressure. The committee reported that nicotine exposure from e-cigarettes varies considerably depending upon the contents of the e-liquid, the type of device that's used and how it is operated.

Nicotine exposure in teens and young adults is worrisome because nicotine can be highly addictive. Due to the fact that the brain is undergoing massive changes during adolescence through the mid- to late 20's, nicotine use may rewire the brain, making it easier to get hooked on other substances and contribute to problems with concentration, learning and impulse control.

\*\*\*\*\*  
**Vaping isn't considered safe for teens and young adults, especially since their brains are still developing.**  
\*\*\*\*\*



Vapor can contain numerous substances including some known to be harmful to health.

## ⚠️ Exposure to Toxic Substances

The report highlights that most e-cigarettes contain and release a number of potentially toxic substances, although exposure to these substances is considerably lower than those found in regular cigarettes.

## Dependence

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Dependence develops when the body adapts to repeated exposure to vaping. When a person stops vaping, he or she can experience withdrawal symptoms, although likely not as intense as those associated with conventional cigarette smoking. The Congressional study reported that e-cigarettes may result in dependence and showed “moderate evidence” that differences in e-cigarette products – including nicotine concentration, flavorings, device type and brand – play a key role in determining the risk and severity of dependence.

## Harm Reduction

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Replacing e-cigarettes for conventional cigarettes reduces users’ exposure to the many harmful substances in combustible cigarettes. Recently, however, concerns have surfaced that rather than decreasing cigarette use, some smokers are using both. They are vaping when they can’t smoke.

## Smoking Risks

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There is worry that teens and young adults who use e-cigarettes will increase their risk of smoking. Teens and young adults who vape are almost 4 times as likely as their non-vaping peers to begin smoking traditional cigarettes, according to [a review published online in JAMA Pediatrics](#).

## Injuries and Poisonings

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Vape devices, especially those with poor quality batteries, or that have been stored improperly or modified by the user, can explode resulting in burns and other injuries. Exposure to e-liquids from drinking, either on purpose or by accident, eye or skin contact, or injection can result in seizures, brain injury due to lack of oxygen, vomiting, problems related to lactic acid buildup in the body or death.

## Cancer and Respiratory Effects

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No data was cited as to whether or not vaping causes cancer or respiratory diseases. Long-term studies are needed as these diseases take years to develop. There is some concern though that vaping can increase coughing and wheezing in teens and may exacerbate asthma.

\*\*\*\*\*

Concerns have surfaced that rather than decreasing cigarette use, some smokers are using both—**vaping when they can’t smoke.**

\*\*\*\*\*

## Marijuana and Vaping

Although the committee's report did not cover marijuana vaping, it is also of concern for adolescents and young adults. Selling equipment to vape marijuana in dab (concentrated wax-like substance) or oil or leaf form is a booming business with many new players.

For example, Pax Labs, formerly Ploom, was founded in 2007 and is a relatively well-known brand for vaping dry leaf marijuana. The company has introduced the Pax 3, which they describe as the "Apple iPhone" of vaporizers as it allows you to vape both dry leaf and wax concentrates. It includes a free Android or iOS app to control temperature, play free games, manage firmware and lock the device.

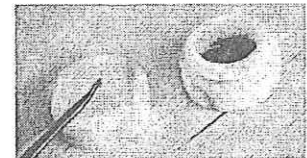
In California, a company called EAZE sells disposable all-in-one marijuana vape pens and cartridges. Flavors include Blueberry Kush, Lemon OG and Mango Passion Fruit. They market these as wellness products with advertising that reads, "Hello Marijuana, Goodbye Insomnia" or "Hello Marijuana, Goodbye Hangover."

Juul can also be used to vape marijuana; however, it should be noted that as of now, Juul does not offer marijuana products. The device has to be hacked in order to use it with THC oils. There are also [companies making pods that fit a Juul](#), so a THC oil pod may be in the future.

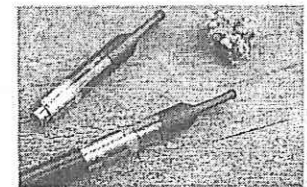
According to the [CDC](#), marijuana use may have long-lasting or permanent effects on the developing adolescent brain. Negative effects include:

- Difficulty with critical thinking skills like attention, problem-solving and memory
- Impaired reaction time and coordination, especially as it relates to driving
- Decline in school performance
- Increased risk of mental health issues including depression or anxiety, and in some cases, psychosis where there is a family history

Research also shows that about 1 in 6 teens who repeatedly use marijuana can become addicted, as compared to 1 in 9 adults. Further, kids who vape are more likely to use combustible cigarettes and try marijuana than their non-vaping peers.



Dab, a concentrated form of marijuana with dab tool



Vape Pen used with THC oil

## How Is Vaping Regulated?

Vaping is illegal for anyone under the age of 18, although in some states the age restriction is 21. Up until 2016, there was little if any regulation of the vaping industry. At that time, the Food and Drug Administration (FDA) introduced the “Deeming Rule,” which placed oversight of vaping products with the organization. In addition to the requirement to check ID, merchants are prohibited from giving away free samples, using vending machines (unless in establishments that don’t allow minors) and claiming that products are safer alternatives to other tobacco products. As of 2018, nicotine warning labels must be on vaping products and they must list all ingredients.

\*\*\*\*\*  
**Vaping is illegal  
 for anyone  
 under the age of  
 18, and in some  
 states under 21.**  
 \*\*\*\*\*

## What Should Parents Know

### What Are the Signs of Vaping?

Although sometimes more subtle, there are clues to look for to see if your child is vaping:

Equipment	You may find devices that look like flash drives, e-juice bottles, pods (that contain e-juice) or product packaging. Aside from leaf marijuana, gel jars that contain dabs, small tools to scoop dabs and cartridges that contain THC oil are signs of vaping marijuana.
Online purchases / packages in the mail / store purchases	Be on the lookout for purchases made online and charged to your credit card or unusual packages that arrive in the mail. Kids also buy them at big box stores, gas stations or from other friends.
Scent	While the smell from vaping is faint, you may catch a whiff of a flavoring where there appears to be no other source. For example, if you smell bubble gum or chocolate cake, take note.
Increased thirst / nose bleeds	Some of the chemicals used in e-juices have the effect of drying out the mouth and nasal passages. As a result, some kids drink more liquids or seem more prone to nose bleeds.
Decreased caffeine use	Some teens and young adults develop a sensitivity to caffeine. If your child drank caffeinated energy drinks and quits, it may be as a result of vaping.
Vaping lingo	You may see vape lingo in text messages such as “atty” for an atomizer, “VG” for vegetable glycerin found in e-juice or “sauce” referring to e-juice. Kids often brag about their vaping exploits on social media. Look for pictures on Instagram or YouTube or check their Twitter accounts.
Appearance and behavior changes	Just like smoking, vaping marijuana can result in bloodshot eyes, dry mouth and thirst, increased appetite and shifts in behavior and mood. Sometimes, there is a noticeable change in friends and a decrease in activities that were once enjoyed.

## What Can Parents Do to Safeguard Against Vaping?

*Be equipped with the facts* Reading through this resource, perhaps more than once, will help you understand the vaping landscape. It's important to be familiar with vape devices (especially JUUL due to its popularity), what's being vaped (i.e. flavorings, nicotine and/or marijuana) and the associated risks.

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*Have conversations* Look for opportunities to discuss vaping with your child. Opportunities may present themselves in numerous ways: letters from the school about vaping policies, advertisements, seeing someone vaping on TV, walking by someone who creates a huge cloud on the street or passing a vape shop. Be ready to listen rather than give a lecture. Try using open-ended questions to get the conversation going such as, "What do you think about vaping?"

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*Try to understand why* Most kids start vaping due to curiosity, the flavors, cloud tricks, wanting to fit in, etc. Over time, vaping can become habitual as it is used to address other needs such as relief from boredom and anxiety. Some kids also become addicted to nicotine and continue vaping to avoid withdrawal symptoms. It helps to understand why your child is vaping by asking questions like: "What do you enjoy about vaping?" or "How does vaping make you feel?" Answers to these questions highlight your child's needs that can be addressed in a healthier way.

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*Convey your expectations* Set clear expectations. Express your understanding of the risks, but also why a person might want to vape. Share why you don't want your child vaping (i.e. concern about toxins, nicotine, marijuana, unknown health risks, injuries due to batteries, gateway to cigarette smoking). If you choose to set consequences, be sure to follow through, while reinforcing healthier choices.

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*Role play refusal skills* If you have a younger teen, it may help to teach your child refusal skills. After all, if your child is in middle school or older, they are likely to be in social situations where they are offered an opportunity to try a flavor. You might ask, "What would you say if someone offered you their vape?" See how your child would handle the situation. Practicing something along the lines of "No thanks, I'm not interested," said with direct eye contact and assertive body language can help your child be prepared.

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*Be a good role model* Set a positive example by being vape and tobacco-free. If you do vape, keep your equipment and supplies secured.



### What to Say When Your Teen Asks:

#### **Q:** *Isn't vaping safer than smoking cigarettes?*

*Your child is exposed to less toxic substances when vaping (as compared to smoking), but there are still significant concerns. Their lungs are exposed to fine particles, metals, other toxins and nicotine which can harm them. You may use the example that, "Driving 90 miles an hour with a seat belt on is safer than without one, but neither is safe. The same goes for vaping. It may be a safer alternative than smoking cigarettes, but neither one is without harm."*

#### **Q:** *They are just flavorings, so what's the big deal?*

*Flavorings are common and considered safe when added to food and eaten, but relatively little is known about the long-term effects on your lungs. For example, there is a chemical called diacetyl that is used as a butter flavoring for candy, yogurt and popcorn, among other foods, and has been found in several e-juices. How these additives interact with the stomach is different than how it may affect your lungs. Diacetyl has been linked to "popcorn lung" which results in scarred lung tissue in workers who have inhaled diacetyl in popcorn factories. While there are no known cases of popcorn lung in people who vape, it typically takes years to develop.*

*Also, e-liquids contain more than just flavorings. Whether it contains nicotine or not, teens also may be taking in fine particles, metals and other toxins. In some cases, teens have vaped e-liquids thinking it didn't contain nicotine, when in fact it did. Deliberate or accidental exposure to e-liquids, whether from drinking, eye or skin contact or injecting it, can be severe, causing seizures or even death.*

#### **Q:** *Everyone is doing it, so why do you care?*

*You can say, "I know you may say this because of what you see in school or even on social media, but the real fact of the matter is that the majority of seniors (and more in lower grades) aren't vaping. While it may be a popular activity for some kids, it doesn't mean that it's safe."*

#### **Q:** *I don't know what to say when other kids offer their vape to me to try.*

*You can say, "Let's figure out what you may be comfortable saying. It's best to be direct and use assertive body language (i.e., direct eye contact with strong posture) and to say something like, 'No thanks, I'm not interested,' or 'You guys can, but I don't want to.'"*

*Another strategy for younger teens is to use an "X" policy. Whenever your child is in an uncomfortable situation and wants an easy out, they can text an "X." You can respond by texting back to say that something has come up and they must head home immediately, or you will pick them up.*

**Q: You smoke, so why shouldn't I?**

*If you've tried to quit, respond by saying "You're right, smoking is unhealthy and I've tried to quit and I wish I had never started. I don't want you to start an unhealthy habit and struggle the way I have to stop."*

**Q: It's legal, so why worry?**

*Vaping is not legal for anyone under 18 (and at 21 in some states). Many things are legal, but that doesn't mean they are safe or harmless.*

*Alcohol is an example of a legal substance, but can result in DUIs, car accidents and major health problems, including liver disease. Similarly, cigarettes are legal, but are highly addictive and proven to cause birth defects and cancer.*

**Q: I'm just doing it once in a while and nothing bad has happened.**

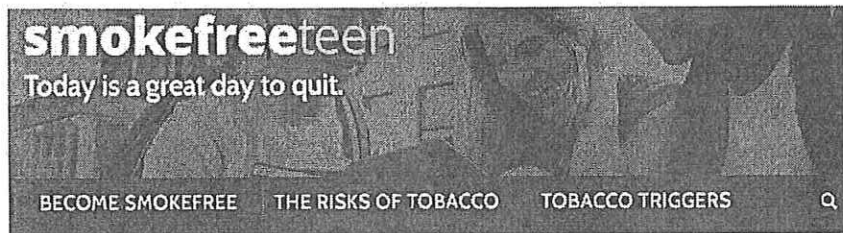
*Respond by asking what your child's experience has been with vaping and pose a question like, "What keeps you from vaping more often?" This isn't to suggest you condone or approve of vaping, but rather to get a sense of what the barriers are to your child's use that you may be able to reinforce.*

These open-ended questions can help you understand what your child sees as the pros, and potentially the cons, of vaping. Again, being clear about your expectations is helpful, in addition to reinforcing healthy behaviors that compete with vaping.

## Resources

*Where can I find more information on vaping?*

- Check out the [U.S. Surgeon General's Report on E-Cigarette Use Among Youth and Young Adults](#).
- Help for your child: If your child vapes or smokes, visit [teen.smokefree.gov](http://teen.smokefree.gov) for resources to help them quit including the quitSTART app and a text messaging program (Text "Quit" to 47848).



### Tools & Tips



- You can also talk to an expert by calling 800-QUIT-NOW (800-784-8669). **Your child may respond to your concerns about vaping if they hear it from another trusted adult or medical professional.**

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*Connect with a Parent Helpline Specialist*

Call 1-855-DRUGFREE

Visit [drugfree.org/helpline](http://drugfree.org/helpline)

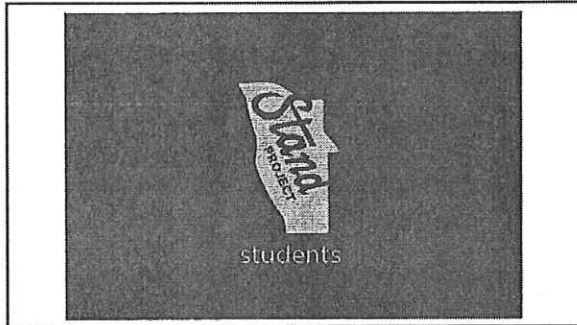
Text a question to 55753

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### Donate to support

Resources like this Vaping Guide are available free of charge because of generous donors. Please consider making a donation at [drugfree.org](http://drugfree.org).

We appreciate your support.



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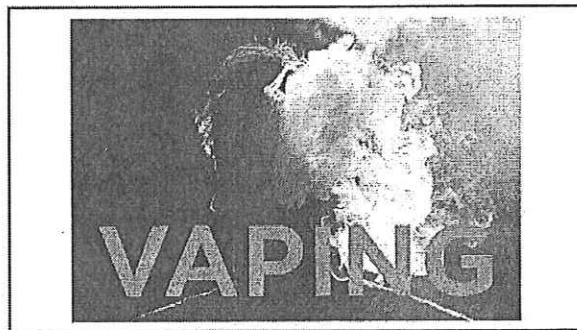
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**More than 3 million middle and high school students were e-cigarette users in 2018.**

No matter the color, shape or name of the device, e-cigarettes are designed to allow users to inhale an aerosol vapor.

Most e-cigarettes are battery-operated and use a heating element to heat the e-liquid.

The e-liquid is either glycerin or propylene glycol mixed with nicotine extracted from tobacco—where it is then sent directly into the bloodstream.

The e-liquid is heated to between 392-482° and then released to be inhaled as a vapor.

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Over 460 different e-cigarette brands are currently on the market. Some common nicknames for e-cigarettes are:

- E-cigs
- Puff Bars
- EZEE
- Suorin
- Hookah pens
- Vapes
- Vape Pens
- Mods
- Flash drives
- Juul

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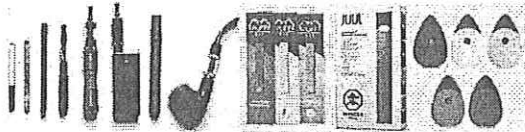
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What do vaping devices look like?



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What does a vaping habit cost?

VAPING (pack a day equivalent)	WEEKLY	MONTHLY	YEARLY
Standard Vaping Kit			\$40-80
Vaping coil replacements + 15ml bottles	\$10	\$50	\$600
			\$680



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81% of young e-cigarette users say the appealing flavors are one of the main reasons for use.

Flavors are **THE HOOK:**  
Nicotine then becomes **THE NEED.**



1 JUUL pod or Disposable Vape = 20 cigarettes

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### Safer ≠ Safe

- Puff Bars, Juuls, Suorin and vape juice--even the ones that say "no nicotine" usually contain nicotine **and a lot of it!**
- Nicotine is as addictive as heroin, cocaine and alcohol--*especially for teens and young adults since **our brains are still developing.***



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### Corporate Greed

- Juul and other vape companies spend **BILLIONS** every year to target teens, minorities, LGBTQ and others to **hook them for life**
- **\$12.8 Billion** = what Marlboro tobacco company paid to be a part of Juul's company
- You are just a potential \$ sign to these companies
- **Don't Repeat History**

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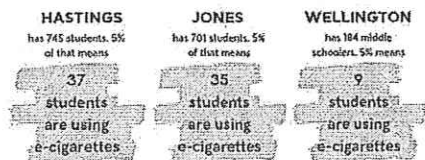
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**Are middle schoolers vaping?**

In 2018, 22% of high schoolers and 5% of middle schoolers were current e-cigarette users.



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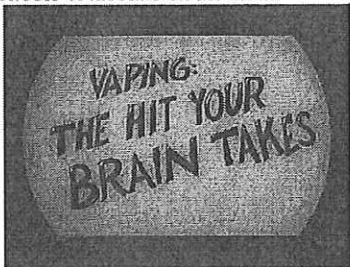
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**The effects of nicotine on the brain:**



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**Nicotine affects learning.**

Nicotine affects the development of brain circuits that control:

- Attention
- Learning
- Impulse Control
- Emotions



*Nicotine can worsen anxiety, mood swings, irritability and our emotional health.*

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**Vaping Affects Your Breathing**



Vaping raises your blood pressure and spikes your adrenaline. This increases your heart rate and the likelihood of developing heart disease.



The Inhalation of Harmful Chemicals Can Cause Irreversible Lung Damage and Lung Disease

Do you want to play a sport at the high school?

Do you want to sing in the choir or a musical?

Do you want to be physically fit?

All of these activities require cardiovascular health.

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**Smoking can harm every organ in your body.**

**1 in 4** people are thought to be genetically pre-disposed to addiction.



**If you are the ONE you risk turning "on" the addictive genetics.**

Nicotine in any form is a highly addictive drug and research suggests that nicotine has the power to prime the brain's reward system, putting 'vapers' at risk for addiction to other drugs.

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**Smoking can cause cancer.**

**1/3** 

**of all cancer deaths in the U.S. are related to smoking.**

90% of lung cancer deaths in the U.S. can be attributed to smoking.

Think about a person who is living with or has passed away from cancer.

Think about the people who surround that person and who love them.

Don't knowingly open the door to this disease.

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**Vaping Related Illnesses Are Rising**

- 2,607 Vaping related illnesses
  - 94% hospitalized
  - 32% required intubation
- 68 Deaths
- Lipoid Pneumonia - Inhaling Fats/Oils from Vape Pens
  - Cough, Wheezing, chest pain
  - nausea, vomiting, diarrhea
  - fatigue, fever, weight loss
- Popcorn Lung - Incurable Lung Scarring
  - Respiratory failure
  - Need Lung Transplant
  - Death



Abuse Prevention  
I was diagnosed with bronchiolitis obliterans, popcorn lung, from a chemical found in 2011 vape juice. It's a incurable condition and in severe cases will result in a lung transplant or can kill you. If you vaped, you'd stop before you've caused permanent damage.

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**Teens Raising Awareness on Instagram**

 **No one thinks this will happen to them and neither did I which is why I kept vaping... don't let vaping win, take back your life and quit.**

 **Chance's lung collapsed while using e-cigarettes. "How many kids are going to have to get hospitalized for us to stop? None should be the answer don't take this with a grain of salt. And keep on pushing yourselves to take control of these cravings."**

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### E-Cigarette Battery Explosions

- A report found there were roughly 2,036 e-cigarette explosion and burn injuries in the United States from 2015 to 2017
- A 17 year old in Utah's vape pen exploded in his mouth resulting in:
  - Major fracture of his lower jaw
  - A 2-centimeter piece of bone that had exploded and was missing
  - Missing multiple teeth
  - Surgeons had to put a plate under his gum.



After the explosion, the patient's lower jaw was fractured and a piece of bone was missing. Surgeons had to put a plate under his gum.

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### Vaping Marijuana

- Big Cannabis is taking the same approach as Tobacco Corporations
- 30% of UAHHS Seniors perceive moderate risk of marijuana use 1-3x per week
- What we know:
  - Frequent marijuana use by adolescents causes:
    - Brain Changes - affect areas responsible for memory, attention, decision making and motivation
    - Impaired Learning - chronic use is linked to declines in IQ & school performance that jeopardizes professional & social achievements and life satisfaction
    - Increased Rates of school absence and drop out & suicide attempts
  - Increased Risk of developing early onset psychotic disorders like schizophrenia, risks increase with:
    - Frequency of Use
    - Potency of THC
    - Age of first use (younger = higher risk)

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### The longer you vape, the harder it becomes to quit.

- Don't Start - The only safe alternative to smoking/vaping is NOT using nicotine
- Don't Wait - Get help if you've started vaping
  - The Earlier You Quit, the Easier it is
  - Texting Quit Plans
    - MyLifeMyQuit.com
    - TeenSmokeFree.gov
    - QuitPlan.com
  - Talk with your Doctor
  - Ohio Tobacco Quit Line (800-784-8669) **Tools**



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