# Vaping: What parents should know Audrey Montanaro, CLMS Health 7/8

# For Parents & Educators...

- •Get the facts, know the risks.
  - In the News: CT Tobacco Laws, Vaping-related respiratory illness
- ·Start the conversation.
  - Be patient, ready to listen and supportive
- Keep the conversation going.
- Set a positive example.



# Teens and Vaping

- Among youth, e-cigarettes are more popular than any traditional tobacco product.
- In 2015, the U.S. surgeon general reported that e-cigarette use among high school students had increased by 900%.
  - o 40% of young e-cigarette users had <u>never</u> smoked regular tobacco.
- Many teens believe that vaping is less harmful than smoking.
- E-cigarettes have a lower per-use cost than traditional cigarettes.
- Vape cartridges are often formulated with flavorings such as apple pie and watermelon that appeal to younger users.

"It's one thing if you convert from cigarette smoking to vaping. It's quite another thing to start up nicotine use with vaping. And, it often leads to using traditional tobacco products down the road." - Michael Bahla, MPH; Director of Clinical Research, John's Hopkins University

# Vaping misconceptions cloud its danger.

It is a marketer's dream, and a parent's nightmare.

- Kids have a misconception that vaping is harmless.
- The pods come in a variety of **kid-friendly flavors** that are more attractive than the taste of tobacco.
- E-cigarettes are **small and easy to hide.** The JUUL looks like a flash drive and can be easily concealed in a pocket or hand.
- Vaping is **easier** to do indoors, such as in bedrooms, school bathrooms and even classrooms, without detection.
- Vaping has become quite common, and kids are exposed to classmates and images of famous people vaping, making it "cool." Peer pressure drives kids to try it, and then they become easily addicted.





# The Basics: What are E-Cigarettes?

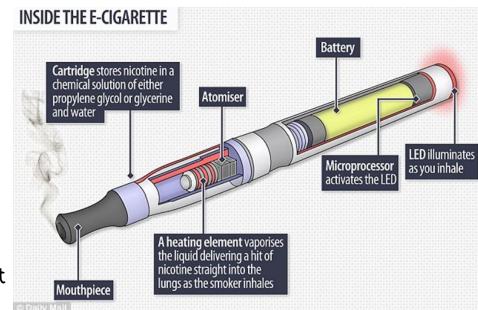
•E-cigarettes are battery powered products that vaporize liquid nicotine or "juice"

#### •E-cigarettes create a vapor from the liquid

- This is NOT water vapor, it is an aerosol
- Inhaling aerosols are bad for your health!

#### A lithium-ion battery powers the atomizer

- When a user inhales, the atomizer makes contact with the battery, activating the heating element.
- The liquid from the cartridge is then heated and vaporized





#### Effects on the teen brain...

□ The Center on Addiction organization states that every drug, whether nicotine, alcohol, marijuana or opioids, are *gateway drugs if used during adolescence* while brain development is still underway.



- □ Nicotine activates the brain's **reward circuit** and also increases levels of a chemical messenger in the brain called **dopamine**, which reinforces rewarding behaviors
- ☐ Addictive substances have been found to damage areas of the brain associated with memory, learning, judgment, decision-making, risk-taking, reward, emotion and stress.
- □ The **damage** may make the individual **more susceptible to addiction**, and could also impair the skills needed to make good decisions and sound judgments, heightening the risk of future substance use and addiction.

# The aerosol from e-cigarettes is not harmless...

- Nicotine content is 0.7mL per pod, which is approximately equivalent to one pack of cigarettes, or 200 puffs.
  - Nicotine is not just addictive, it stimulates your adrenal glands, spiking adrenaline production and leading to a series of bodily reactions: People who use nicotine experience a release of glucose and an increase in heart rate, breathing rate and blood pressure.
- Fine and ultrafine (UF) particles that can be inhaled deep into the lungs.
  - Heavy metals: chromium, lead, nickel and tin.
- Volatile organic compounds (VOCs) such as benzene, which is found in car exhaust

## The aerosol from e-cigarettes is not harmless...

#### Additives:

- o Glycerol serves as a humectant, which means it adds moisture to the solution.
- **Propylene glycol** is a synthetic compound commonly used in polyester production & as an additive for food, cosmetic, pharmaceutical and household products.
- Formaldehyde: 2015 study revealed that e-cigarette vapor can contain formaldehyde at levels 5-15 times higher than the formaldehyde in regular cigarettes.
  - Burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea;
     and skin irritation
  - Formaldehyde is a known carcinogen
- Benzoic acid is "generally recognized as safe" as a food additive/preservative, but can be an environmental and health hazard in large quantities.
- Flavorings: various natural and synthetic ingredients that companies use to flavor their products.
  - Diacetyl chemical linked to "popcorn lung" disease

# Lung Illnesses Associated with Use of Vaping Products

https://www.nm.org/healthbeat/healthy-tips/emotional-health/vaping-4-risks-for-kids

- As of October 15, 2019, <u>1,479</u> lung injury cases associated with e-cigarette use, or vaping, have been reported to CDC.
- 33 deaths have been confirmed in 24 states
  - Nearly two thirds (62%) of patients are 18 to 34 years old; with 22% of patients between 18-21.
  - 16% of patients are under 18 years.
- All reported patients have a history of e-cigarette product use or vaping.
- The specific chemical exposure(s) causing lung injuries associated with e-cigarette use, or vaping, remains unknown at this time.



## Tobacco products and the LAW

**Connecticut**: Legal age to purchase tobacco and nicotine products is now 21. The new law also imposed greater restrictions on the areas where people can smoke or vape. The practice will be forbidden *indoors and outdoors* on s*chool property at all times*.

**Massachusetts**: Gov. Charlie Baker declared a public health emergency in the face of more than 500 vaping-related lung illnesses and announced the country's strictest vaping prohibition yet: a four-month, **statewide ban** on online and retail sales of all marijuana and tobacco **vaping products**, flavored or otherwise.

Rhode Island: state's Department of Public Health to ban the sale of flavored e-cigarettes in the state.

**Michigan**: First state to put a ban on all flavored e-cigarettes. It covers sweet, fruit flavors as well as mint and menthol, but *allows the sale of tobacco-flavored vape products*.

**New York**: Governor Andrew Cuomo issued an "emergency" executive order to take *flavored vape products* off shelves to prevent underage New Yorkers from using them. An appeals court has blocked the ban, and the legal battle ensues.

California: San Fransisco put a blanket ban on all e-cigarettes.

Washington, Oregon, & Montana: Announced a ban on flavored vape products (including those with THC).

#### Concerned? Here's what to look for...

#### SIGNS OF VAPING:

- Presence of vaping equipment or related product packaging
- Unusual online purchases or packages
- The scent is faint, but you may catch a whiff of flavoring like bubble gum or chocolate cake
- Increased thirst or nose bleeds
- Decreased caffeine use
- Use of vaping lingo in text messages or on social media
- Appearance and/or behavior changes



# Is your teen hiding it?

Vape hoodies have specially designed tubed



These vaping pens double as writing instruments.





Vaping backpacks typically conceal tubing and a mouthpiece in the shoulder strap and a mouthpiece in the a vaping device. That can be connected to a vaping device.

Dr. Michael B. Siegel, MPH, a tobacco control expert and public health researcher at the Boston University School of Public Health, states:

"There is no substitute for honest conversation. Youth are very curious and will appreciate honesty and a discussion where they are learning something much more than being scolded or told what not to do."

"It will also take some of
the glamour out of vaping
if the parent knows
everything about it. Part of
the appeal is that parents
have no idea what their kids
are doing."

#### What can PARENTS do?

**Be equipped with the facts:** 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.

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?"

#### What else can PARENTS do?

**Try to understand why:** Most kids start vaping due to *curiosity*, the *flavors*, cloud *tricks*, wanting to *fit in*, etc.

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.

**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.

#### What else can PARENTS do?

Role play refusal skills: If you have a younger teen, it may help to teach your child refusal skills. Have your child practice saying exactly what he/she would say out loud.

- 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.
  - Other REFUSAL SKILLS include:
    - State the consequences

"I don't want to get grounded" "Haven't you heard of that lung disease?" "I don't want to get hooked"

■ Make up an excuse

"I have asthma" "I'm allergic" "I need to go pick up my sister" "My parents would smell it on me"

■ Suggest an alternative

"Let's go play basketball instead" "I don't want to vape, but I'd be down to get Dunkin!"

Be a good role model: Set a positive example by being vape and tobacco-free.

#### Resources:

https://drugfree.org/article/how-to-talk-with-your-kids-about-vaping/

https://www.healthline.com/health-news/teens-and-disguised-vaping-devices

https://www.cdc.gov/tobacco/basic\_information/e-cigarettes/severe-lung-disease.html#latest-outbreak-information

https://www.cnet.com/news/juul-what-is-it-how-does-it-work-and-is-it-safe/

https://e-cigarettes.surgeongeneral.gov/knowtherisks.html#aerosol-exposure

https://www.hopkinsmedicine.org/health/wellness-and-prevention/5-truths-you-need-to-know-about-vaping