

## PEP TALKS

### NICOTINE & JUUL

#### LESSON OUTLINE

PART	DESCRIPTION	DURATION (45 MINUTES)
<b>I.</b>	<b>Introduction</b>	<b>5 min</b>
	What is PEP?	
	PEP Mission	
	What Do You Know?	
<b>II.</b>	<b>Definitions: What is it?</b>	<b>10 min</b>
	What is Nicotine? What is JUUL?	
	Inside Look: How does it work?	
<b>III.</b>	<b>Stats: Who's using?</b>	<b>2 min</b>
<b>IV.</b>	<b>Why do teens JUUL?</b>	<b>3 min</b>
<b>V.</b>	<b>What are the potential risks?</b>	<b>5 min</b>
<b>VI.</b>	<b>What Now?</b>	<b>10 min</b>
	Parent Strategies	
	Resources	
<b>VII.</b>	<b>Questions?</b>	<b>10 min</b>
<b>VIII.</b>	<b>Follow us on Instagram @nycPEP</b>	

## LESSON PLAN

### I. Introduction

- Introduce yourself
  - “Hi, my name is ... I am...”
  - “I was invited today on behalf of your school and The Prevention & Education Partnership (PEP) to talk about teen vaping, and more specifically, around the use of a product called JUUL.”
- **What is PEP?**
  - We are a group of ER doctors from the Department of Emergency Medicine at NYU Langone Health and Bellevue Hospital, who are committed to educating NYC students, their parents, teachers, and schools about the harms of drug and alcohol use.
- **PEP Mission**
  - Our mission is to keep your child safe, healthy and out of the emergency room
- **What Do You Know?**
  - Ask: “What do you know about vaping or JUUL?”

### II. Definitions: What is it?

- Ask: “What is nicotine?”
- Nicotine = a chemical found in, and extracted from, plants such as the tobacco plant (*Nicotiana tabacum*) or made in a lab.
- Nicotine is present in:
  - Tobacco products, including cigarettes, cigarillos, cigars, shisha (used in hookahs), dip, and snus.
  - Tobacco-FREE products, like gum, patches, and e-cigarettes like JUUL
- Ask: “What is JUUL?”
  - JUUL = the most popular brand of electronic or e-cigarette on the market; according to its founders, JUUL was invented as a form of nicotine replacement, to help people quit smoking cigarettes
  - E-cigarette = a device that releases nicotine and/or flavor chemicals as vapor, which reduces, but does not eliminate, the number of harmful chemicals that users inhale compared to traditional cigarettes
  - JUUL components:
    - JUUL pod (reservoir for e-liquid)
    - Heat source
    - LED power indicator
    - Rechargeable battery
    - USB charger

- Ask: “What are the main ingredients in e-liquid (aka e-juice, vape juice)?”
  - (+/-) Flavor additives = originally designed to be eaten, these chemicals are now being inhaled in vapes; one such chemical, diacetyl, has been found to cause a severe and irreversible form of lung disease aka “popcorn lung”
  - (+/-) Nicotine (or THC oil)
  - Propylene glycol (PG) = a preservative; breaks down into a cancer-causing chemical (i.e. formaldehyde)
  - Glycerol aka vegetable glycerin (VG) = a chemical that helps produce vapor; although relatively harmless on its own, when combined with PG, it breaks down into cancer-causing chemicals
- **Inside Look: How does it work?**
  - Ask: “How does nicotine work in the body?”
  - Answer: Nicotine binds to receptors in the brain, spinal cord, muscle, and blood vessels, altering the release of chemicals that affect attention, mood, and appetite. Nicotine stimulates the “fight or flight” and “rest and digest” systems. Nicotine also activates the “dopamine reward pathway”, which increases one’s motivation and energy for certain behaviors, promoting addiction.

### III. Stats: Who’s using?

- Ask: “What percentage of teens vape nicotine or JUUL?”
  - Stat: 21% of high schoolers report vaping nicotine (CDC, 2018)
- Ask: “Still, why is it worrisome that more teens are vaping nicotine?”
 

Answer: Because nicotine is a highly addictive substance. E-cigarettes like JUUL were designed to help people addicted to nicotine quit smoking cigarettes, not to get non-smokers hooked on nicotine. These products may allow people to consume more nicotine than those who smoke regular cigarettes or revert to using more harmful tobacco products. Also, because these products are so new, the long-term health risks are largely unknown.

### IV. Why do teens JUUL or vape?

- Ask: “Why do you think that teens vape or JUUL?”
- Answer: According to surveys, the top reasons teens vape include (MTF, 2016):
  - To “experiment, to see what it’s like”
  - Perception that vaping/JUULing is harmless or less harmful than regular cigarettes
  - The flavors “taste good”
- Additional reasons include:

- Because early e-cigarette and JUUL ads have marketed heavily to young people, especially on social media
- Because JUUL and other vape products are easy to get
- Ask: “Where are teens getting JUUL?”
  - Retail Stores
  - Friends and family
  - Internet (Online stores, Amazon, Ebay)

#### V. Hidden Costs: What are the potential risks?

- Ask: “What are the risks of nicotine?”
  - Tolerance, dependence, withdrawal, and addiction
    - Tolerance = when your body gets “used to” having a drug around, so that you need to use more of the drug to get the same effect
    - Dependence = when your body gets “used to” having a drug around, so that you need to use the drug in order to feel “normal”
    - Withdrawal = once drug dependence occurs, if you abruptly stop or decrease use of that drug, your body can develop symptoms as if you’re are sick
      - In the case of nicotine withdrawal, one can experience headache, fatigue, difficulty concentrating, irritability, anxiety, difficulty sleeping, nausea, increased appetite/weight gain, constipation, and/or diarrhea
  - Addiction = compulsive (uncontrolled) use of a drug that leads to negative effects on one’s life, finances, schoolwork, job, and relationships
    - Consequences of addiction may include:
      - Isolation from peers and family
      - Neglecting schoolwork and other extracurricular activities
      - Decreased motivation for anything other than obtaining the drug
      - Stealing to support addiction
      - Increased physical and emotional pain
      - Shame
      - Depression
- Ask: “What are the added risks of vaping?”
- Answer:
  - Vaping is so new, we still don’t know:
    - All of the potential risks

- What impact vaping high doses of nicotine will have on developing brains
- What other flavor chemicals, like diacetyl, will prove harmful
- Research also confirms the presence of cancer-causing chemicals (carcinogens) in vape smoke. Because cancer takes a long time to develop, it is unclear what long-term effect this will have
- However, data is emerging to suggest that vaping nicotine may cause significant health risks. In fact, recent studies indicate that those who vape nicotine daily are at increased risk of having:
  - Lung disease (i.e. asthma, infections, COPD)
  - Heart attacks
  - Strokes
- Ask: “What are the legal risks of vaping? What do the laws state about selling and/or using JUUL specifically in NYC?”
- Answer:
  - Selling e-cigarettes without a valid NYC tobacco retail dealer license is a misdemeanor, punishable by fines or other penalties
  - It is illegal to purchase e-cigarettes/JUUL/vape products if under 21
  - It is illegal to smoke/vape anywhere indoors in NYC

#### VI. What Now?

- Ask: “What can you do as a parent?”
- Answer: Our Vaping handout includes strategies recommended by NYU Langone and Bellevue child psychiatrists and psychologists to help you address teen vaping. These strategies include tips on how to model healthy behavior, how to talk to your teen, and how to help them quit. It also includes a comprehensive list of resources.

#### VII. Questions?

- Description: Final opportunity for parents to ask questions
- Action: Answer final questions

#### VIII. Follow us on Instagram @nycpep!

- Our Instagram is designed for a teen audience. Encourage your teen to follow us

#### References

- NYC Health. New York City and State Penalties for Selling Tobacco Products, Electronic Cigarettes or Non-Tobacco Smoking Products to Underage Customers. 2018. Available at:

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- Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion. Youth and Tobacco Use. Available: [www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/youth\\_data/tobacco\\_use/index.htm](http://www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/index.htm). Accessed March 12, 2019