THE VAPE

What I need to know

February 2018
What’s Up with JUUL/e-cigarettes

Electronic cigarettes (e-cigarettes/VAPES) are seen in stores, advertisements, or even being used, but the e-cigarette (while increasingly popular) are not harmless because they are designed to deliver the same highly addictive nicotine that is in tobacco cigarettes without the other harmful effects of tobacco.
VAPE Devices
So what’s the Difference

Stronger E-Cigarette/Vape

- **Salt-based nicotine**: 59 mg of nicotine per ml
  - Pods not refillable
- **Freebase nicotine**: anywhere from 0 to 36 mg of nicotine per ml
  - Refillable tank

tobaccopreventiontoolkit.stanford.edu
Pods Vs Refills

Pods

- Youtube Videos have shown how to’s on refill
- Costly
- Small and easily concealed
- 1 pod equal to smoking ½ pack of cigarettes for the Nicotine content
- Various flavors
- Odor is Fruity and hard to detect
- Higher in Nicotine 59mg/ml

Liquid Refills

- Various substance have been found to include illegal narcotics
- Large in size
- Various Flavors
- Odor is fruity and hard to detect
- Inexpensive
- 0-39mg/ml of Nicotine
How Much is That?

59 mg/ml!

5% strength of what?

How much is 5%?
• 59 mg/ml = extremely high!
• 59 mg/ml = pack of cigarettes
• 1 POD=1/2 pack of cigarettes
• Use of benzoic acid
• NOTE: EVERY JUULPOD CONTAINS NICOTINE!
More Nicotine = More Smoking and or Vaping
What’s in that Pod

- Nicotine
- Benzoic Acid
- Glycerol
- Propylene Glycol
- Natural Oils
- Extracts and Flavors
- ?????

*>20 Million have been produced

30% of the market
Definitions:

**GAS**
A substance with indefinite expansion. When you let a gas out of its bottle, it will usually keep spreading out until it’s completely mixed with the air.

**Vapor**
It can mean the same as gas, but it may also be used to describe a visible exhalation, such as steam or fog. “Vapor” isn’t as precise a term as “gas” or “aerosol.”

**Aerosols**
A mixture of liquid particles suspended in a gas. Instead of just mixing with the air like a pure gas, aerosols can leave drops behind.
Do you think that vape smoking is a gas, vapor, or aerosol
What’s in E-Cigarette Aerosol

- Propylene glycol, Glycerin, Flavorings(various), Nicotine, NNN, NNK, NAB, NAT, Ethylbenzene, Benzene, Xylene, Toluene, Acetaldehyde, Formaldehyde, Naphthalene, Styrene, Benzo(b) fluoranthene, Chlorobenzene, Croton aldehyde, Propionaldehyde, Benzaldehyde, Valeric Acid, Hexanal, Fluorine, Anthracene, Acenaphthene, Fluoranthene, Benz(a) anthracene, Chrysene, Retene, Benzo(a)pyrene, Indeno(1,2,3-od)pyrene, Benzo(ghi)perylene, Acetone, Acrolein, Silver, Nickel, Tin, Sodium, Strontium, Barium, Aluminum, Chromium, Boron, Copper, Selenium, Arsenio, Nitrosamines, Polycyclic aromatic hydrocarbons, Cadmium, Silicon, Lithium, Lead, Magnesium, Manganese, Potassium, Titanium, Zinc, Zirconium, Calcium, Iron, Sulfur, Vanadium, Cobalt, Rubidium
Propylene Glycol = AntiFreeze

Acetone = Nail Polish Remover

Formaldehyde = Embalming

Ethylbenzen = Paint, Pesticides

Nicotine = Cigarettes/Tobacco

Rudium = Fireworks
What About The Second Hand Smoke?
How Does Second Hand Smoke Effect Nicotine & other chemicals
Vape and your Body
How Nicotine Effects Your Body

Trouble Breathing
Damage to the Lungs

The Heart beaths faster and activates the fight or flight response

Increased acid reflux
MAN LOSES 7 TEETH AFTER VAPE PEN EXPLODES IN HIS FACE

U.S.
Long Term Effects - What are They?

When Inhaled:
- Irritation to the Lungs, nose, and throat
- Coughing, shortness of breath, and even wheezing have been experienced

When Exposed to the skin
- Cracking and Drying of the skin
- Little Research completed

Nicotine addiction
Resources

- Stanford Medicine - [http://med.stanford.edu/tobaccopreventiontoolkit/E-Cigs/ECigUnit2.html](http://med.stanford.edu/tobaccopreventiontoolkit/E-Cigs/ECigUnit2.html)
- Google Images
- Science News for Students, May 29, 2015, [https://www.sciencenewsforstudents.org/article/vaping-may-harm-lungs](https://www.sciencenewsforstudents.org/article/vaping-may-harm-lungs)
- Stanford University, Tobacco Prevention Toolkit, E-Cigarette and Vape Pen Module Unit 6 Quiz