



# THE VAPE

What I need to know





# 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



Image Credit: [https://vaping.com/blog/wp-content/uploads/2017/08/IMG\\_18993\\_01762.jpg](https://vaping.com/blog/wp-content/uploads/2017/08/IMG_18993_01762.jpg)

[tobaccopreventiontoolkit.stanford.edu](https://tobaccopreventiontoolkit.stanford.edu)





# Pods Vs Refills

## Pods

- Youtube Vidoes have shown how to's on refill
- Costly
- Small and easily consealed
- 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?

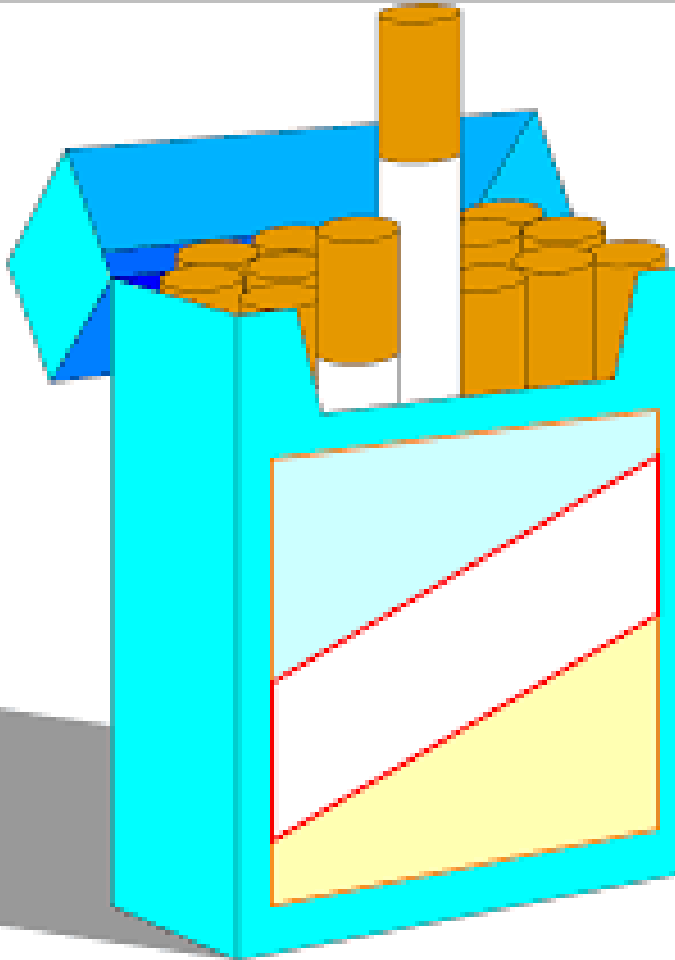


**5% strength  
of what?**

**How much  
is 5%?**

Image Credit: <https://ecigaretterevuewed.com/wp-content/uploads/2017/11/juul-mango-pod.jpg>





- 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, Hexananal, Fluorine, Anthracene, Acenaphthene, Fluoranthene, Benz(a) anthracene, Chrysene, Retene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(ghi)perylene, Acetone, Acrolein, Silver, Nickel, Tin, Sodium, Strontium, Barium, Aluminum, Chromium, Boron, Copper, Selenium, Arsenic, 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,Pestisides



Nicotine=Cigarettes/Tobacco



Radium=Fireworks





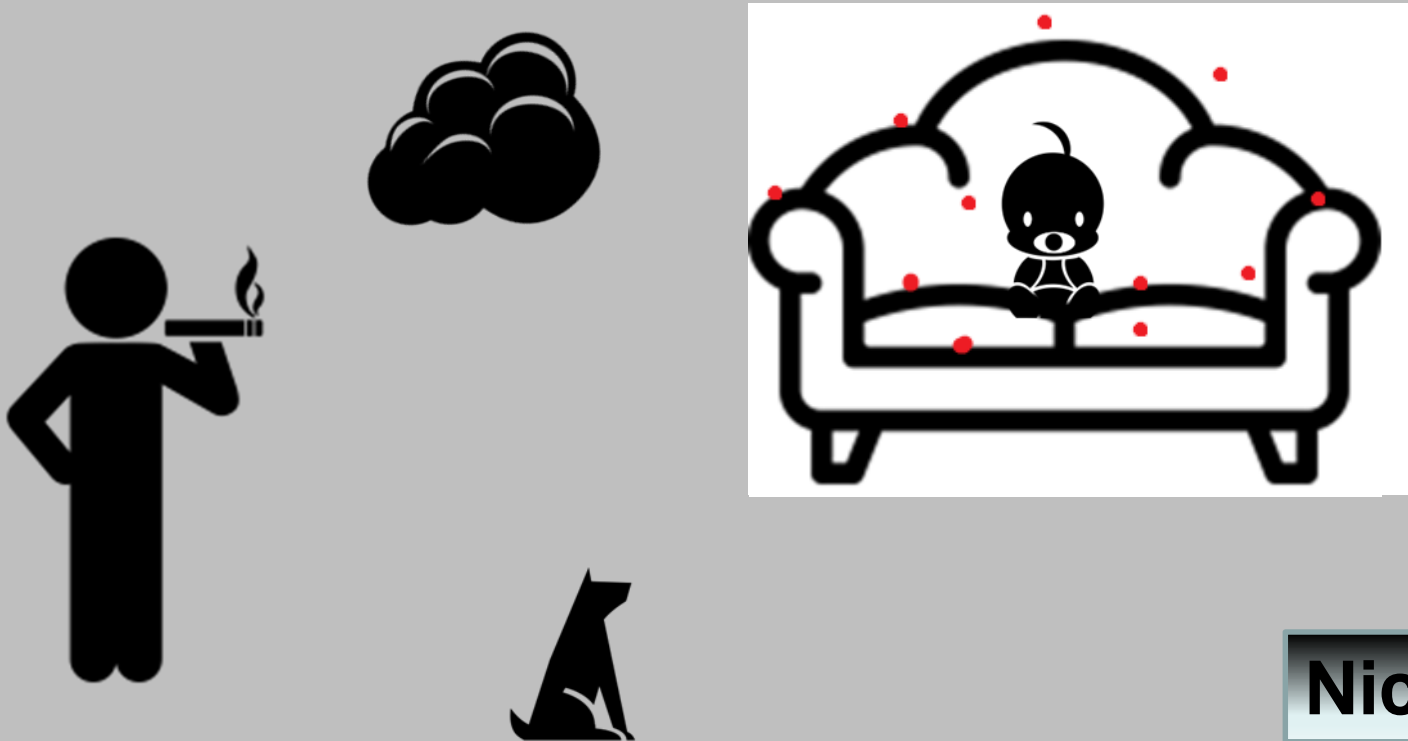


# What About The Second Hand Smoke?





# How Does Second Hand Smoke Effect



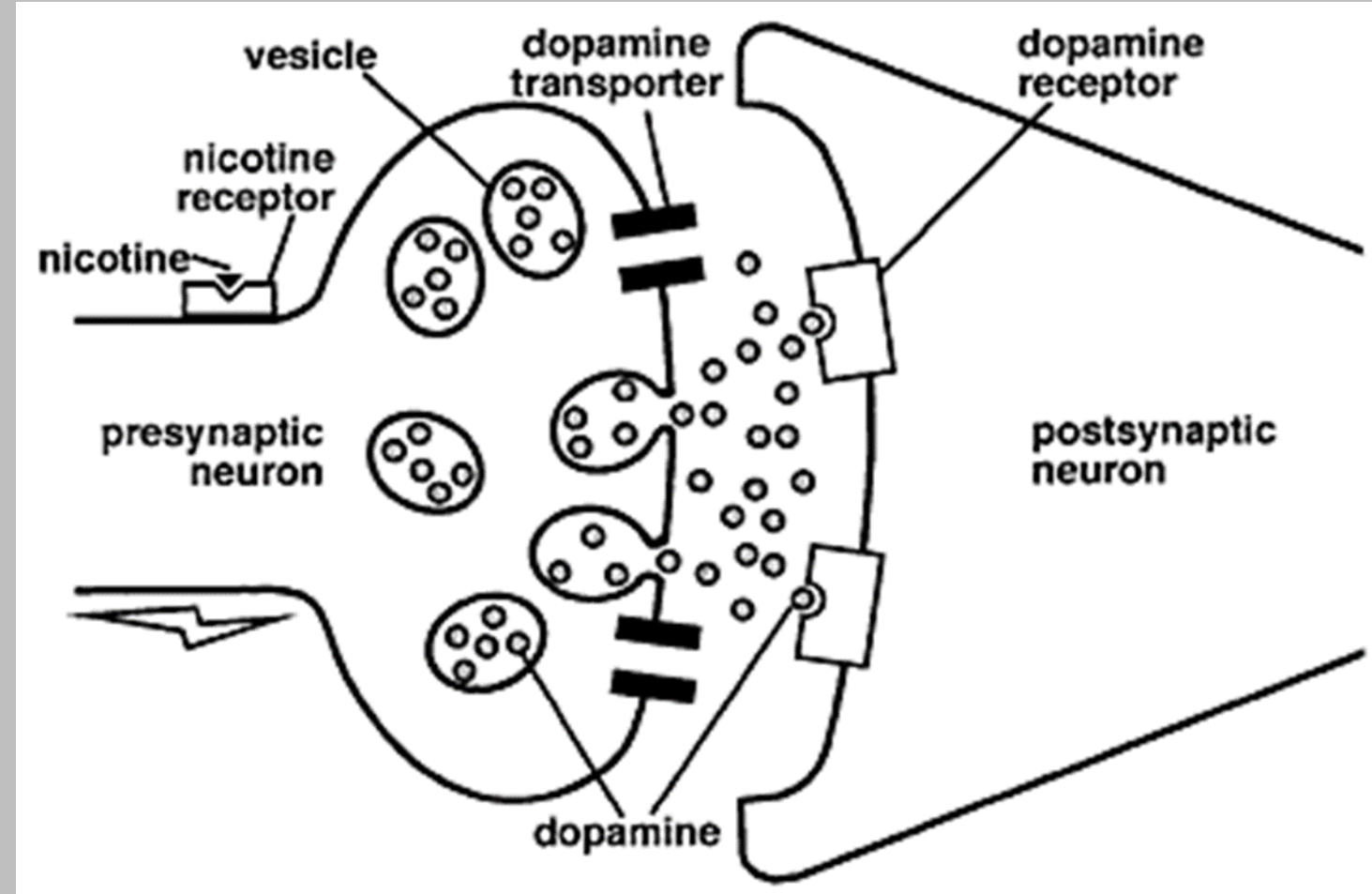
**Nicotine & other chemicals**





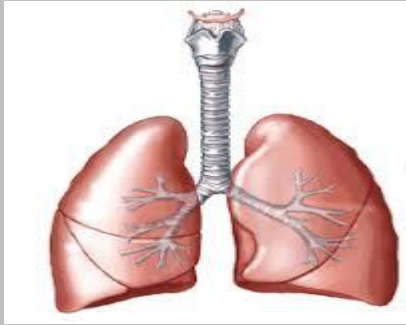


# Vape and your Body

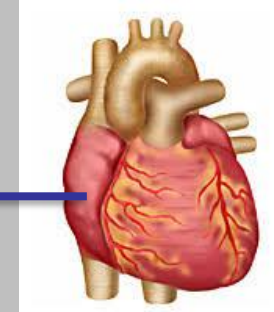




# How Nicotine Effects Your Body



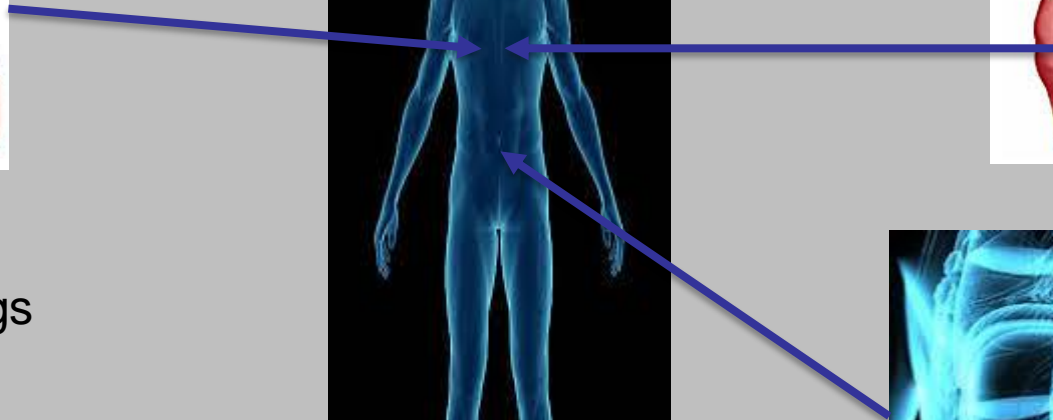
Trouble Breathing  
Damage to the Lungs



The Heart beats  
faster and  
activates the fight  
or flight response



Increased  
acid reflux





TOMONEWS



# MAN LOSES 7 TEETH AFTER VAPE PEN EXPLODES IN HIS FACE

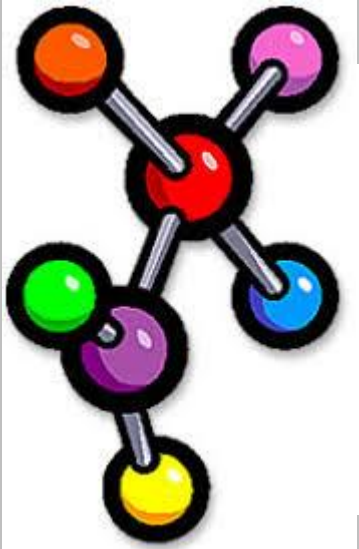
U.S.







# Long Term Effects-What are They?



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## 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>
- Google Images
- Science News for Students, May 29, 2015, <https://www.sciencenewsforstudents.org/article/vaping-may-harm-lungs>
- NBC News, E-Cigarettes: The Health Risks of Vaping, November 13, 2017, <https://www.nbcnews.com/better/health/better-cigarettes-vaping-comes-its-own-set-health-risks-ncna819716>
- Stanford University, Tobacco Prevention Toolkit, E-Cigarette and Vape Pen Module Unit 6 Quiz

