### FLAVOR BAN

# HEART DISEASE, TOBACCO, AND VAPING

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### PRESENT

Smokers amongst all stent procedures at UVMMC 2018-2019

Stent procedures UVMMC FY2019



Large heart attacks (STEMI) treated at UVMMC FY2019

# 460/0

Patients with large heart attacks at UVMMC and in recent international trials who are current smokers

# \$13,243.22

Medicare reimbursement in Vermont for acute myocardial infarction with complications in 2017 (DRG 280)

\$4,773,095.81

Total Medicare payments for treatment of 457 Vermonters (statewide data) with acute myocardial infarction in 2017 (DRG 280, 281, 282, and 283)

### HEART ATTACK



### PAST

### 51% to 17%

Decrease in smoking in American males 1965 to 2015

34% to 14%

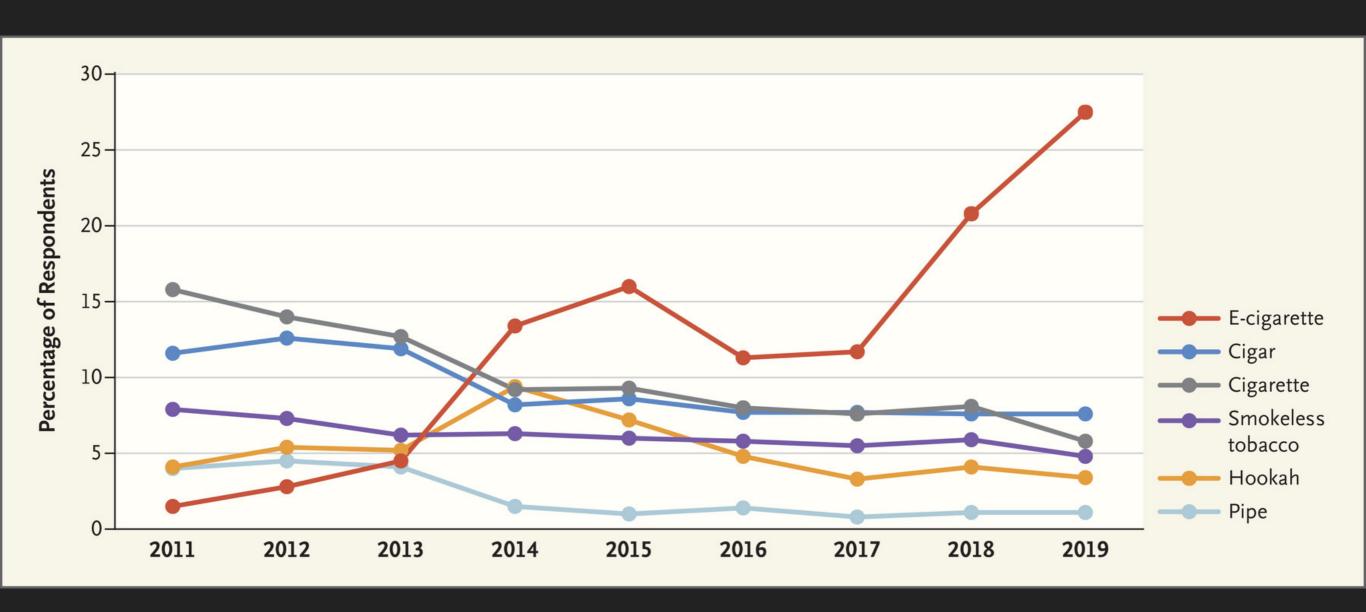
Decrease in smoking in American females 1965 to 2015

13% to 3%

Decrease in smoking in American youth age 12-17 2002 to 2016

16% to 8%

Decrease in smoking in American high school students 2011 to 2016



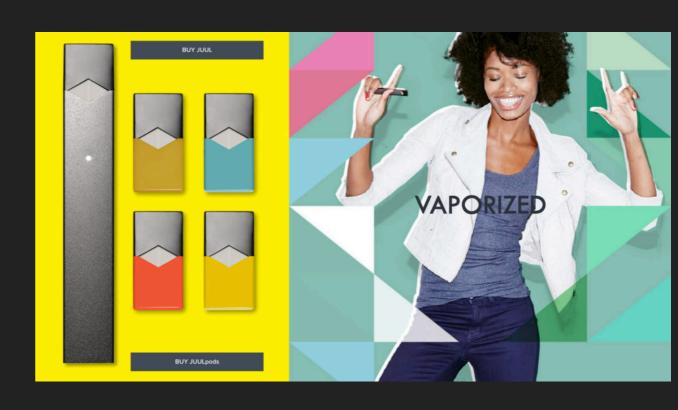
CDC data for various tobacco product usage in US teens, NEJM 2020.

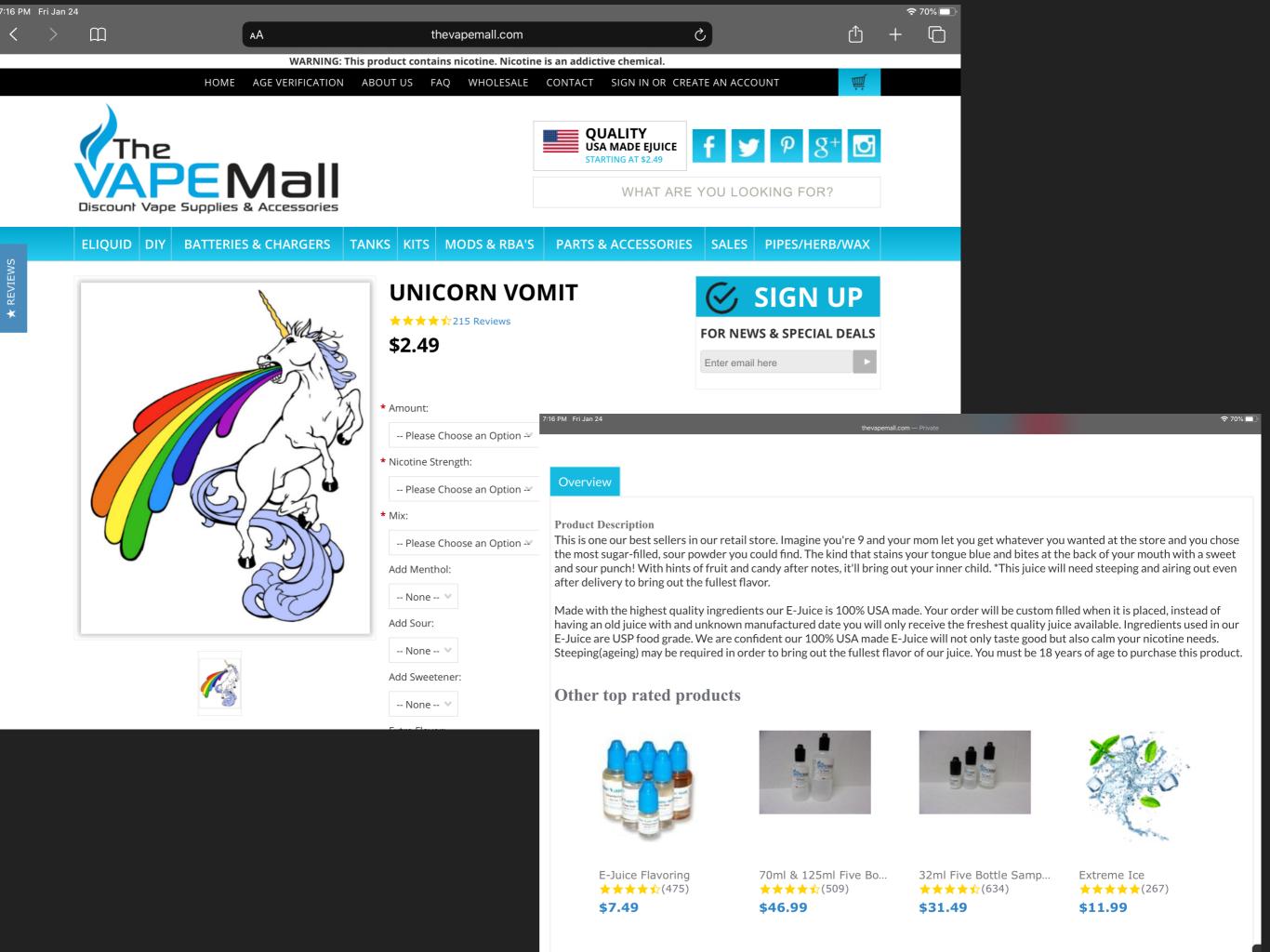
## FUTURE (?)













### **Product Description**

This is one our best sellers in our retail store. Imagine you're 9 and your mom let you get whatever you wanted at the store and you chose the most sugar-filled, sour powder you could find. The kind that stains your tongue blue and bites at the back of your mouth with a sweet and sour punch! With hints of fruit and candy after notes, it'll bring out your inner child. \*This juice will need steeping and airing out even after delivery to bring out the fullest flavor.

Made with the highest quality ingredients our E-Juice is 100% USA made. Your order will be custom filled when it is placed, instead of having an old juice with and unknown manufactured date you will only receive the freshest quality juice available. Ingredients used in our E-Juice are USP food grade. We are confident our 100% USA made E-Juice will not only taste good but also calm your nicotine needs. Steeping(ageing) may be required in order to bring out the fullest flavor of our juice. You must be 18 years of age to purchase this product.

### Other top rated products









# up to 8x

Likelihood that e-cig user subsequently starts smoking (compared to non-users)

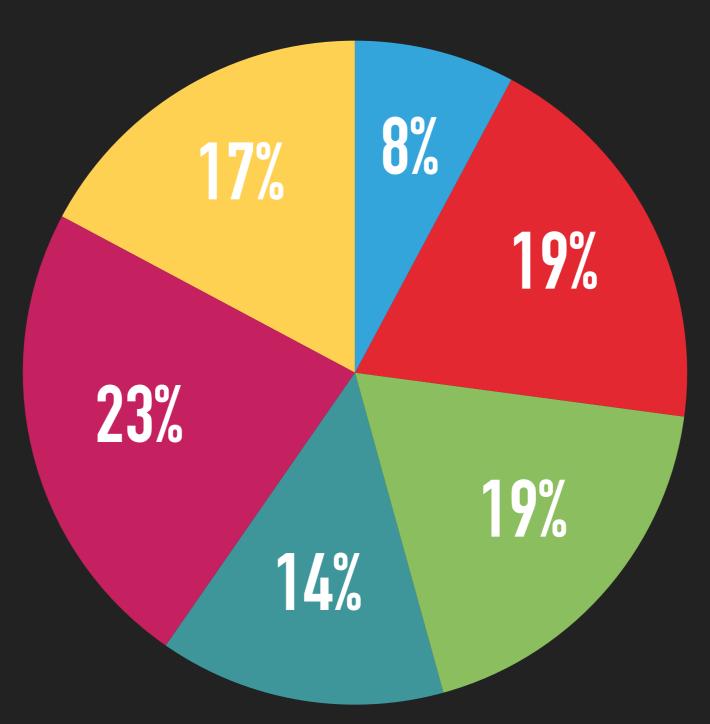
### NATIONAL HEALTH INTERVIEW SURVEY BY THE CDC

n=96,467 > age 18

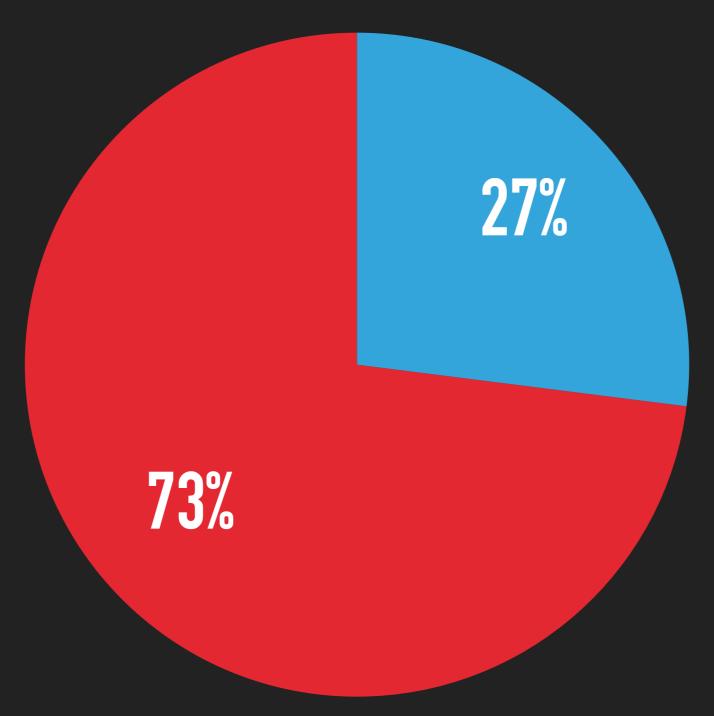
2014, 2016-17

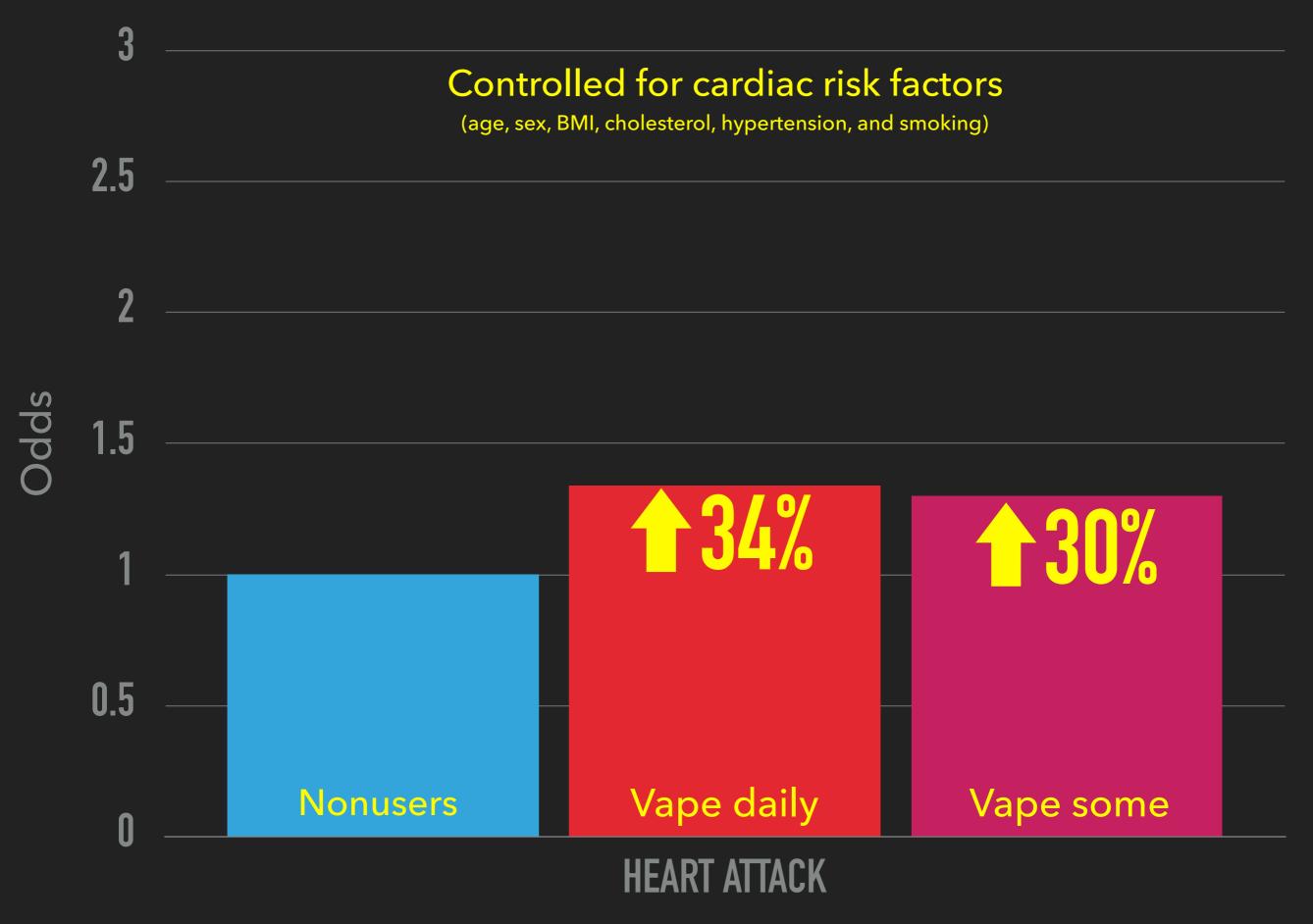
- Less than high school
- Some college
- BA, BS, AB, BBA

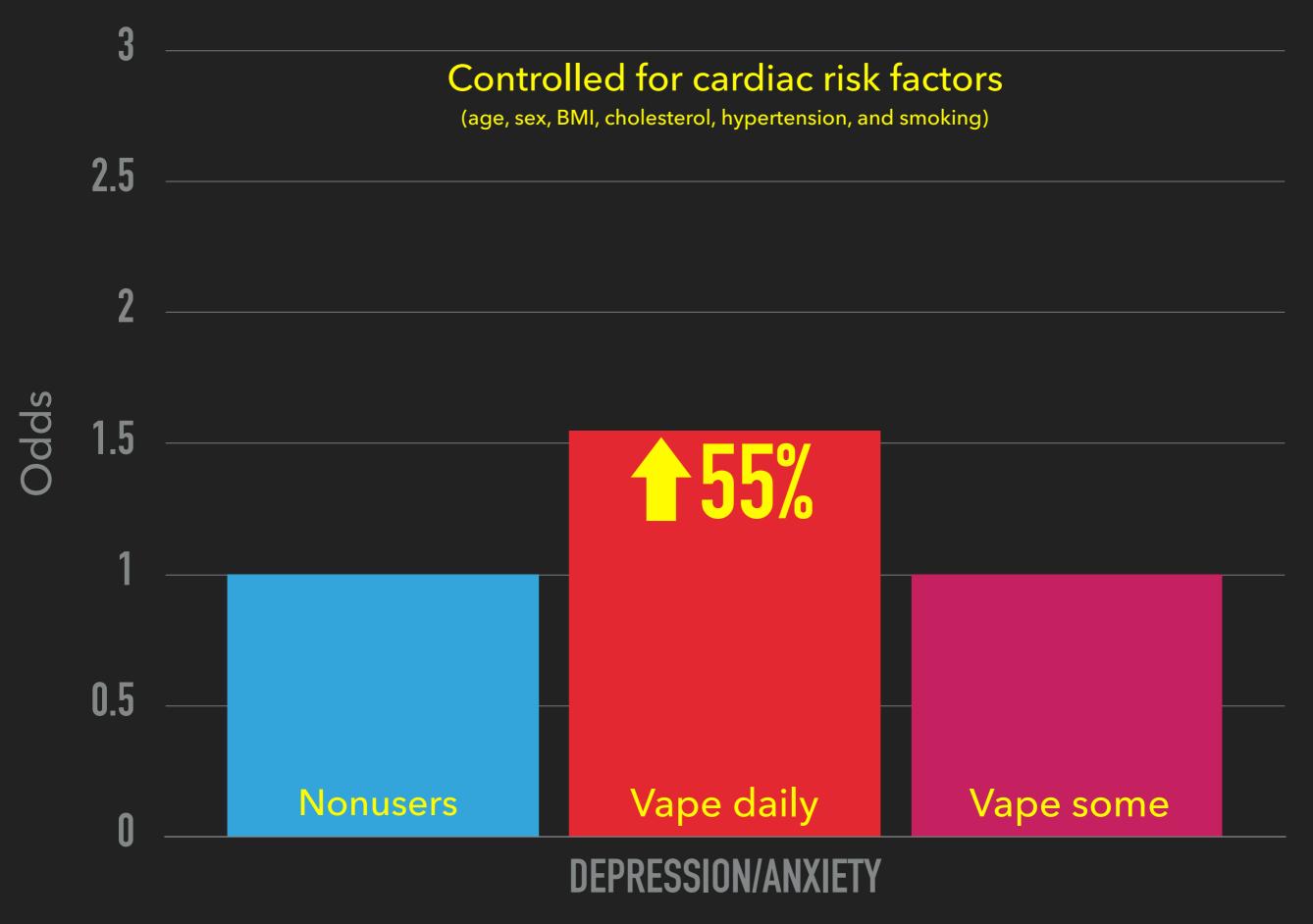
- High school/GED
- Degree
- Masters/Prof/Doct











### Association, not causation

Decreased heart rate variability suggestive of increased sympathetic tone similar to smoking cigarettes (JAMA Cardiology, 2017)

Increased LDL oxidizability compared to non-smokers (*JAMA Cardiology,* 2018)

Vaping nicotine-free products causes vascular dysfunction on MRI in otherwise healthy volunteers. (*Radiology*, 2019)

Vaping nicotine-free products causes increased markers of inflammation in healthy volunteers. (Am J Physiology, 2019)

E-cigarette use produced an adverse lipid profile and glucose alterations in a pattern similar to smoking. (*Circulation,* 2019)

Chronic E-cigarette users demonstrate more persistent coronary endothelial dysfunction than chronic combustible cigarette users. (*Circulation*, 2019)