

Vaping: The Knowns Knowns, the Known Unknowns, and the Unknown Unknowns

Robert McMillen
18 October 2019

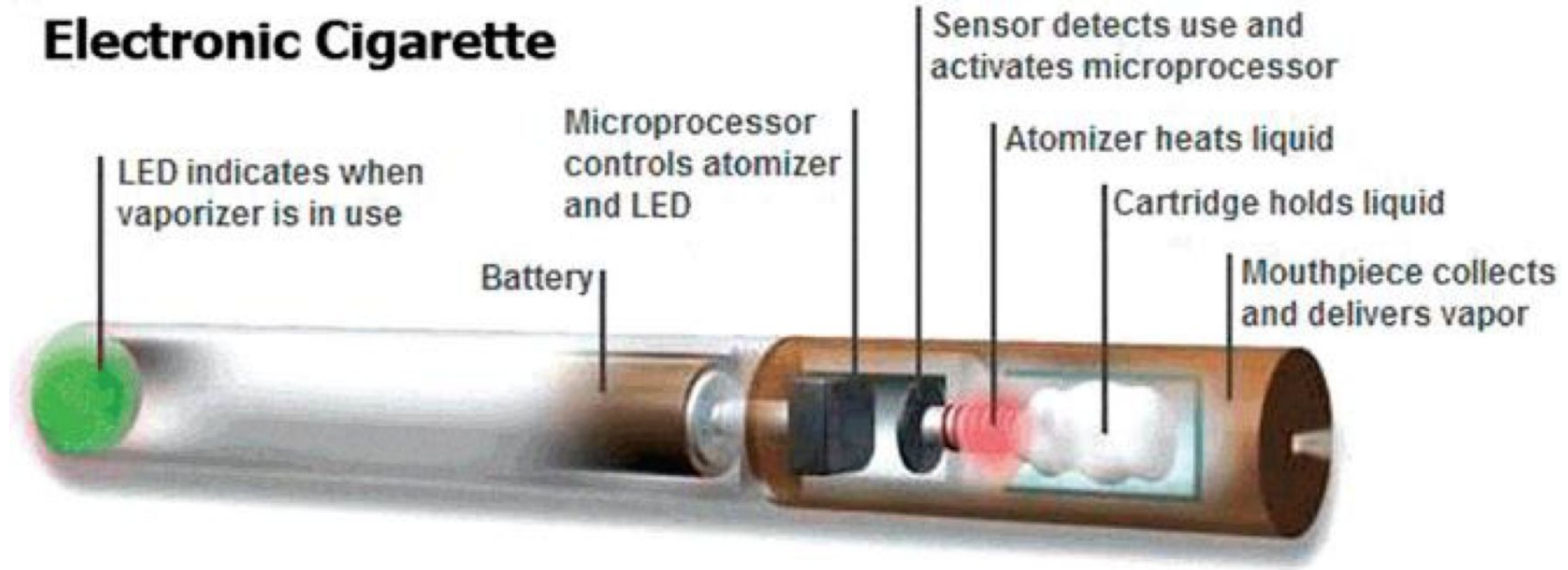


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A First Generation E-Cigarette

Electronic Cigarette

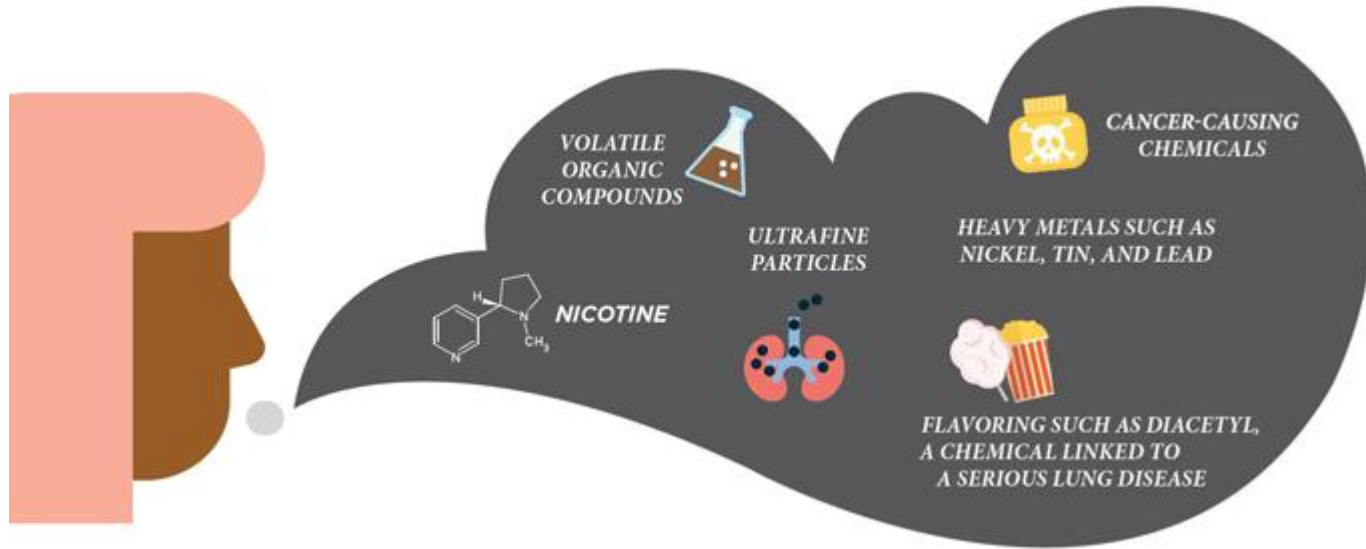




The Knowns

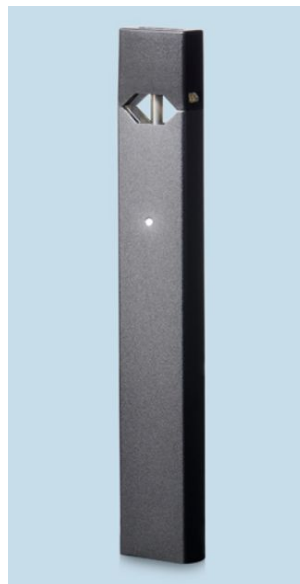
- Not a harmless water vapor
- No meaningful federal or Mississippi regulation
- All e-cigarettes are technically illicit
- These are evolving products
- A risk factor for cigarette smoking
- Use is increasing in teens and college students
- Can cause very different health effects than cigarettes
- Counterfeit e-cigarettes confuse the market

Not a Harmless Water Vapor - It's an aerosol



No meaningful federal or Mississippi regulation





Getting Cigg-E With It

December 21, 2018 · 1 min read

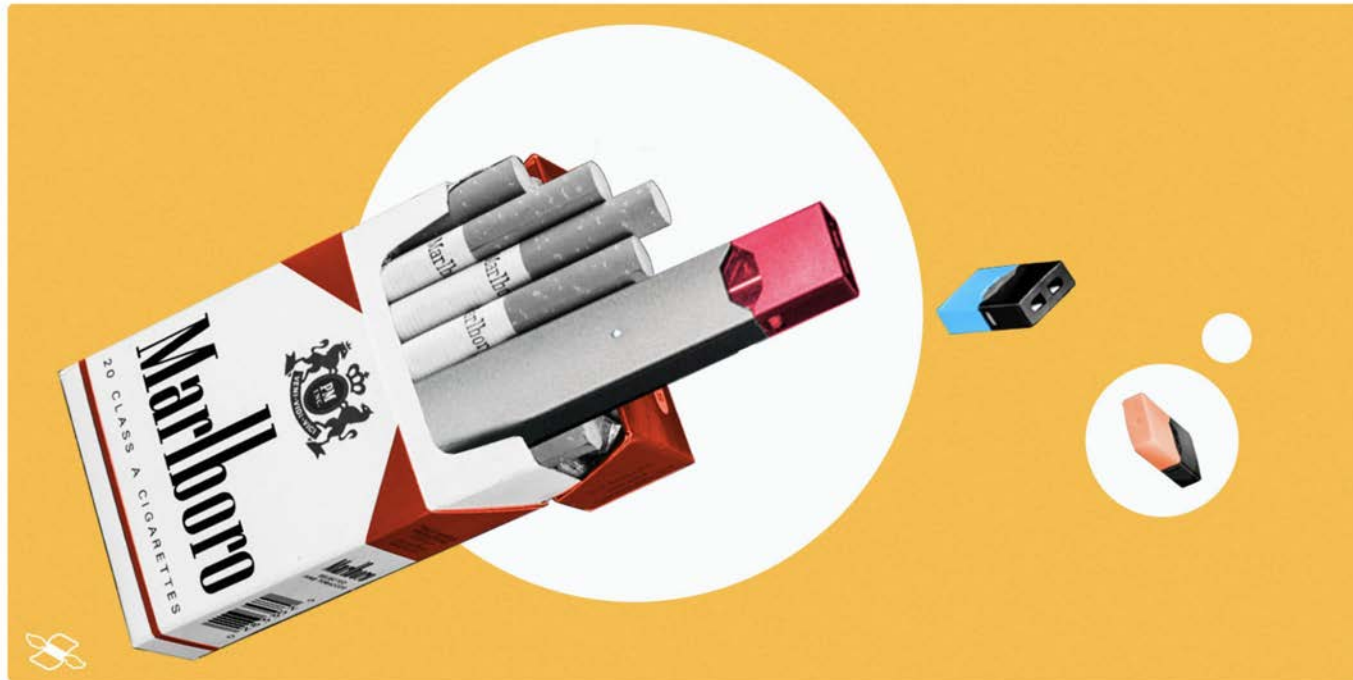


Image source: Steve Heap, Oleg Golovnev - Shutterstock



A risk factor for cigarette smoking

- There is **substantial evidence** that e-cigarette use increases risk of ever using combustible tobacco cigarettes among youth and young adults.
 - Soneji et al, 2017
 - National Academies of Science, 2018
 - Barrington-Trimis, 2016
 - Best, 2017
 - Conner, 2017
 - Doran, 2017
 - Hornick, 2016
 - Leventhal, 2015
 - Loukas 2015
 - Miech, 2017
 - Primack, 2015
 - Primack, 2016
 - Spindel, 2017
 - Unger, 2016
 - Wills, 2016

Research

E-Cigarette Use and Future Cigarette Initiation Among Never Smokers and Relapse Among Former Smokers in the PATH Study

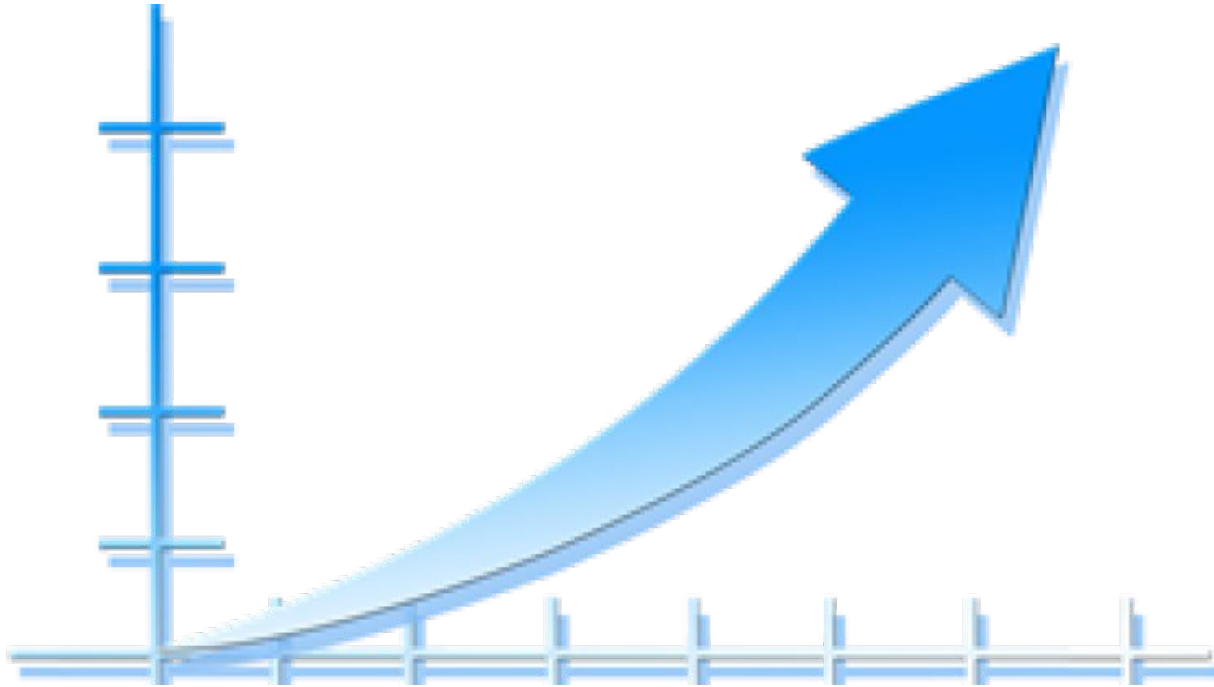
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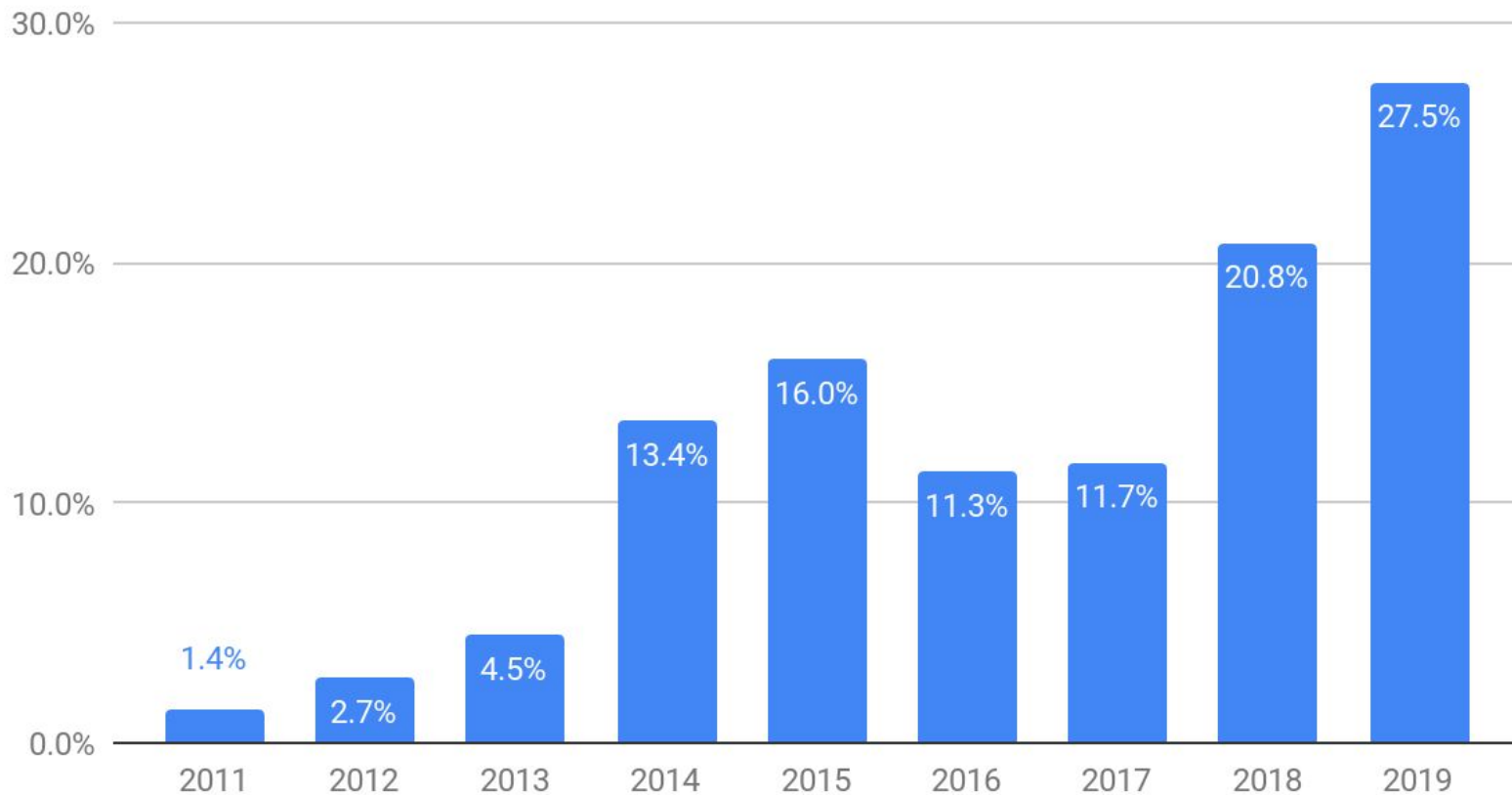




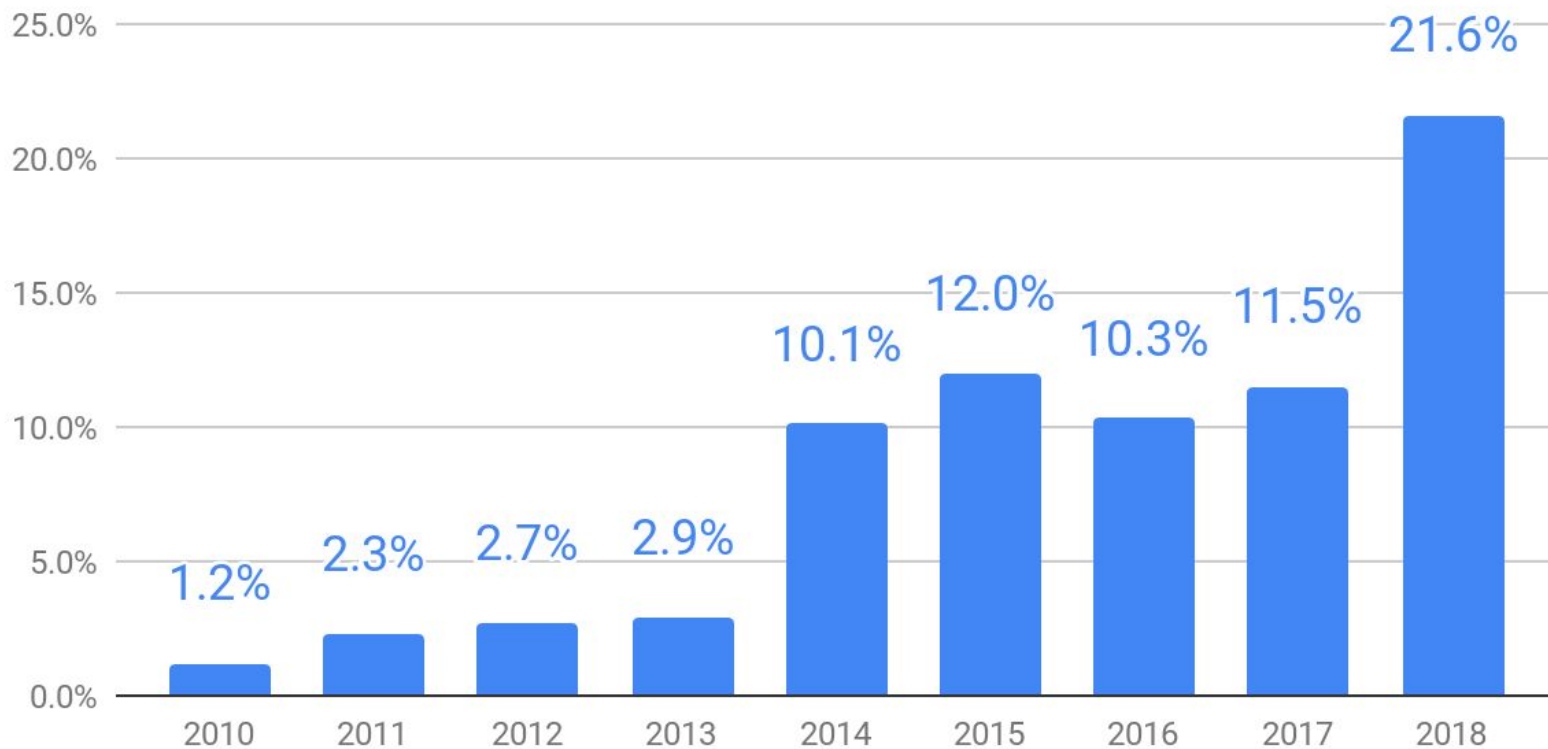
Use among Teens and College Students is increasing



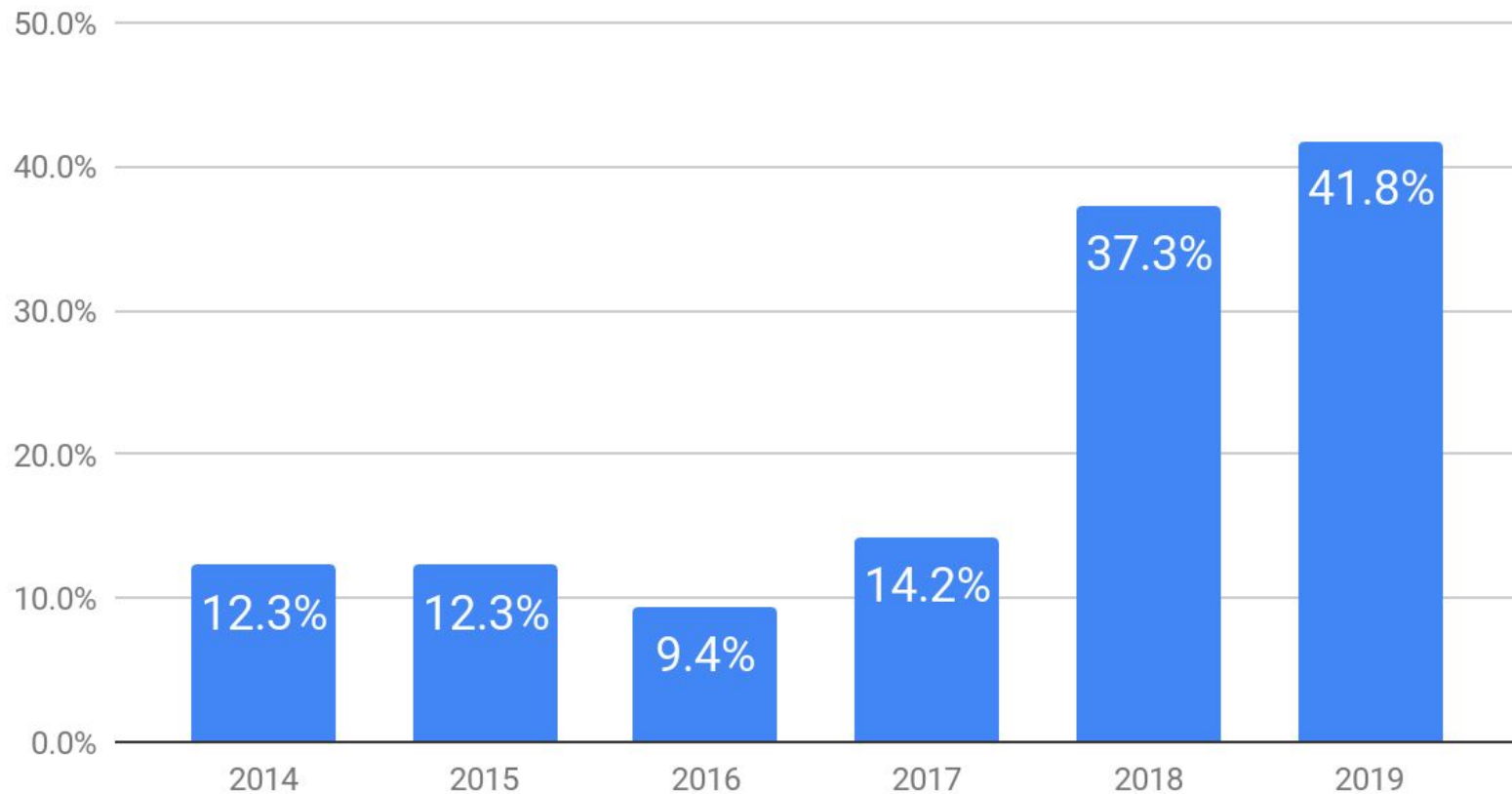
Past 30-Day E-Cigarette Use, U.S. High School Students, NYTS



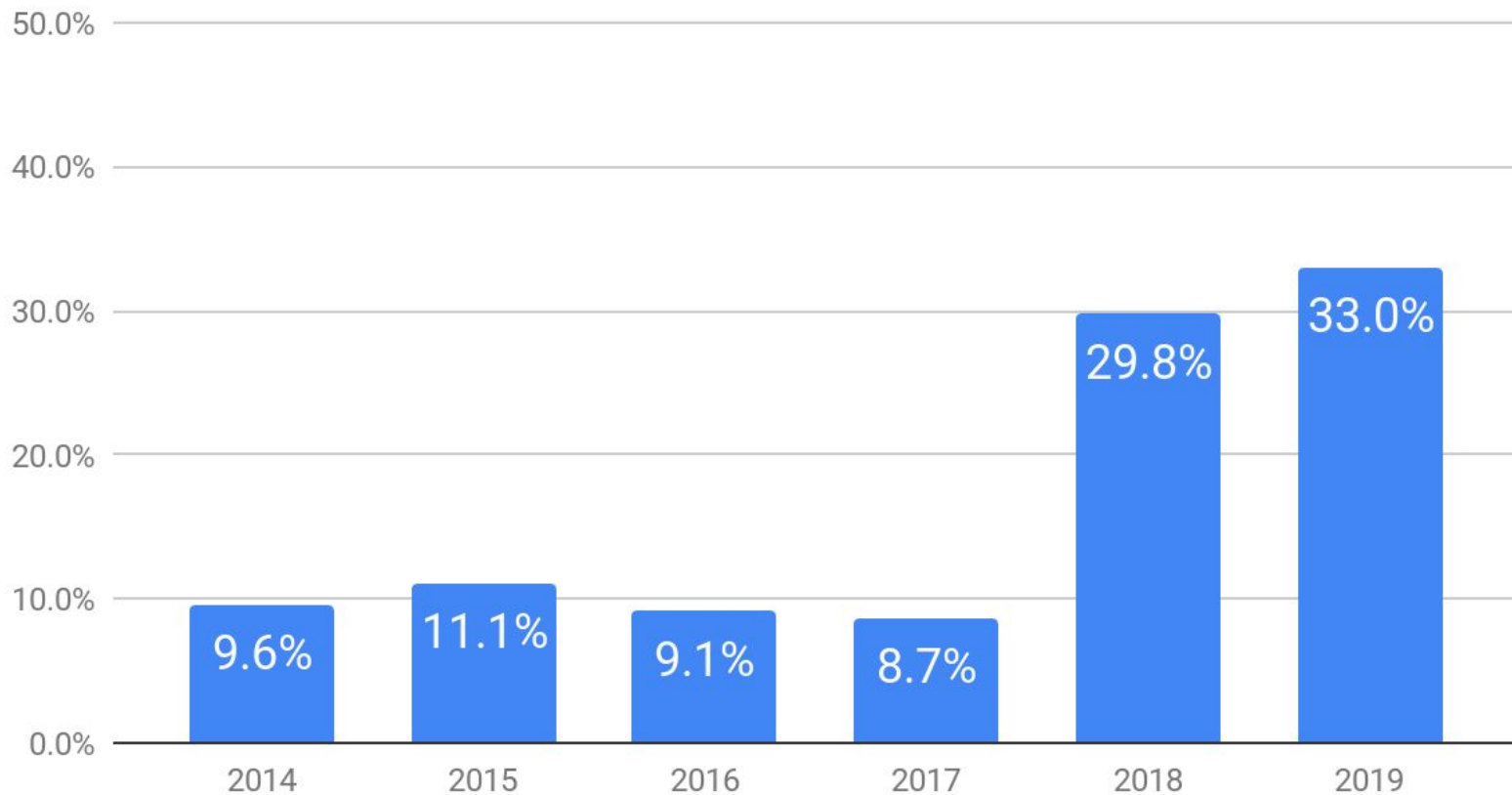
Past 30-Day E-Cigarette Use, MS High School Students, 2018 YTS



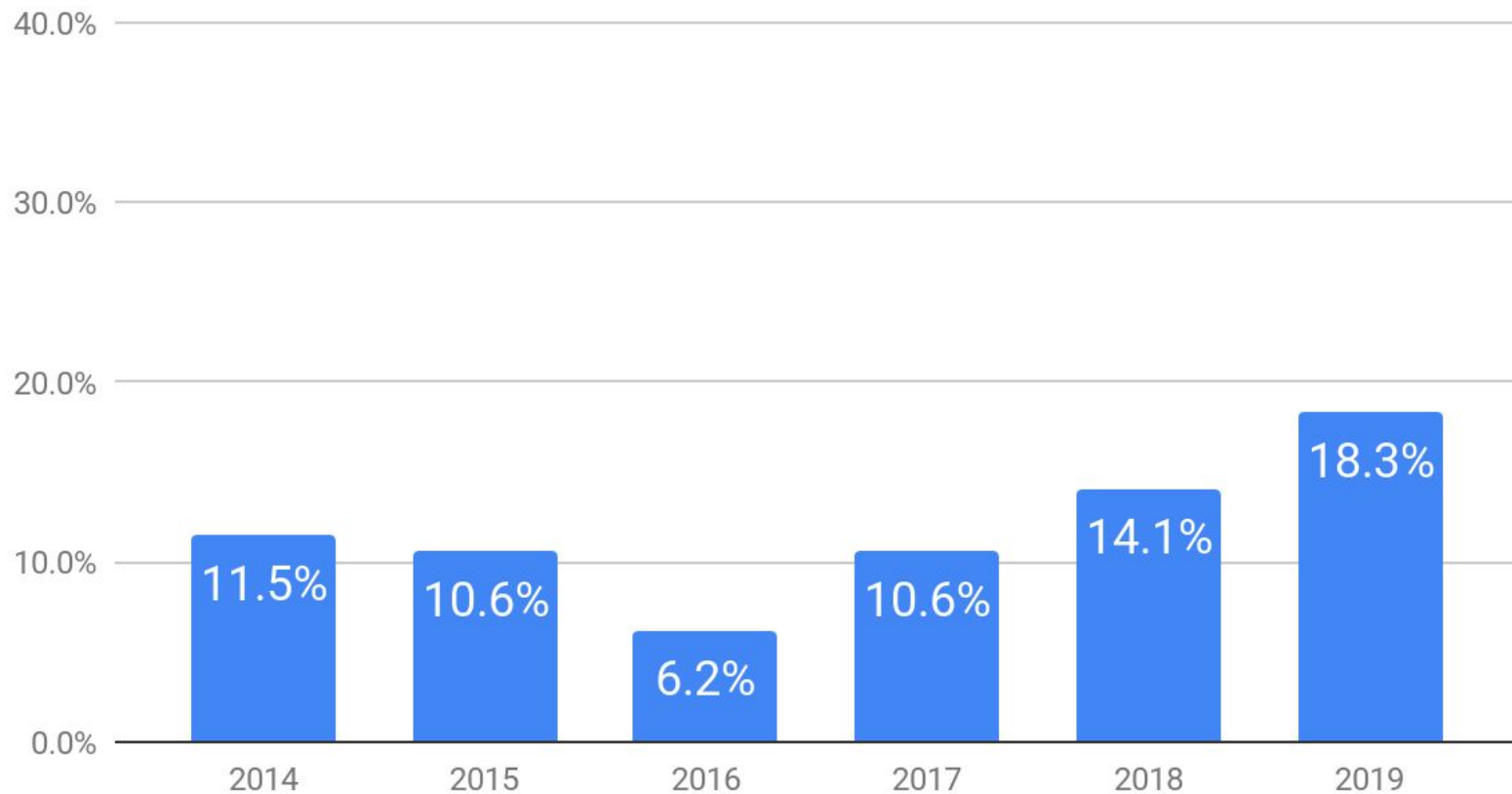
UM Students Who Report Past 30-Day Use of an E-Cigarette



MSU Students Who Report Past 30-Day Use of an E-Cigarette



USM Students Who Report Past 30-Day Use of an E-Cigarette



Mysterious vaping illness outbreak grows to nearly 1,300 cases and 26 deaths

Health officials in US are urging people not to vape as exact cause of illness remains a mystery

Denise Grady | 3 days ago |





Latest from the CDC - 17 October 2019

- As of October 15, 2019, 1,479* lung injury cases associated with the use of e-cigarette, or vaping, products have been reported to CDC from 49 states (all except Alaska), the District of Columbia, and 1 U.S. territory.
- Thirty-three deaths have been confirmed in 24 states.



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AUGUST 28, 2019 4:25PM ET

Counterfeit Weed Vape Cartridges Are Everywhere — and They're Making People Sick

"E-cigarettes cause their own problems. But this is a totally new issue"

HEALTH AND SCIENCE

Fake Juul pods line store shelves, worrying users and posing another threat to the embattled company

PUBLISHED MON, AUG 26 2019 · 1:31 PM EDT | UPDATED MON, AUG 26 2019 · 1:44 PM EDT



The Known Unknowns

- Cessation research is inconclusive
- Addiction trajectories
- How to treat e-cigarette addiction
- Short- and long-term health impacts
- Marketshare
- Terminology
- Punishment or treatment for teens



Health Implications of E-Cigarettes

- Promote cessation? or
- Catalyst to nicotine use and smoking?

Pathways to Addiction?





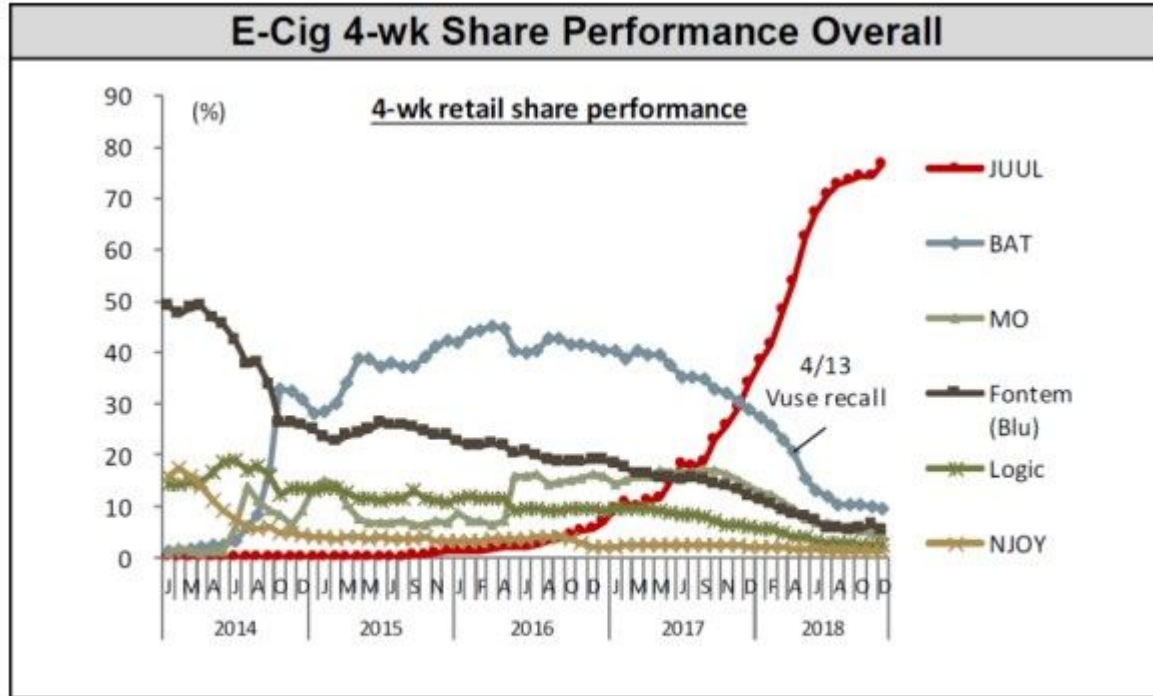
Addiction Treatment for Adolescents?



Short- and Long-Term Health Effects?

- Short-term
 - Infectious disease?
 - Lung failure?
- Long-term
 - Cardiovascular?
 - Lungs?
 - Cancers?

Marketshare?



Source: Nielsen Total US xAOC/Convenience Database & Wells Fargo Securities, LLC



Terminology?

INTERNATIONAL

Take It In: 'Vape' Is The Oxford Dictionaries Word Of The Year

November 17, 2014 · 7:12 PM ET

Heard on Morning Edition

BILL CHAPPELL



Vape was chosen as the word of the year for 2014 in part because it provides a window "onto how we define ourselves," says Casper Grathwohl of the Oxford University Press. Here, women exhale vapor clouds during a competition at the Henley Vaporium in Manhattan.

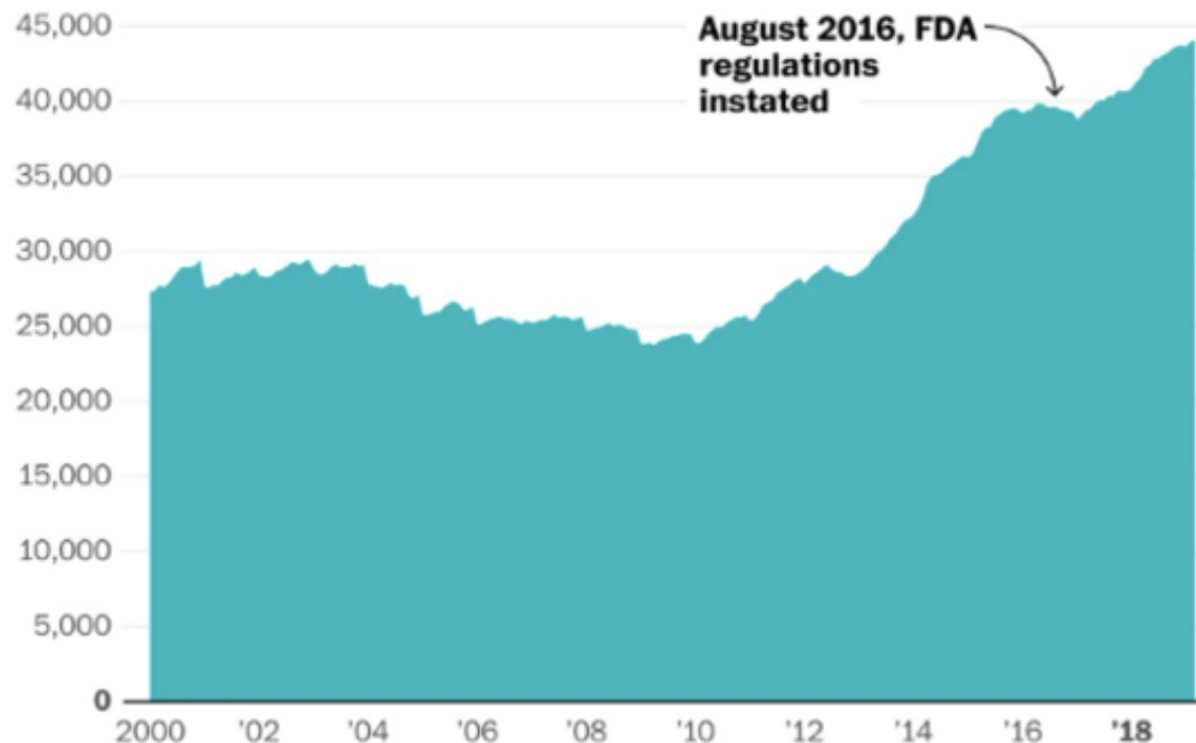
Elizabeth Shafiroff/Reuters/Landov



The Unknowns Unknowns

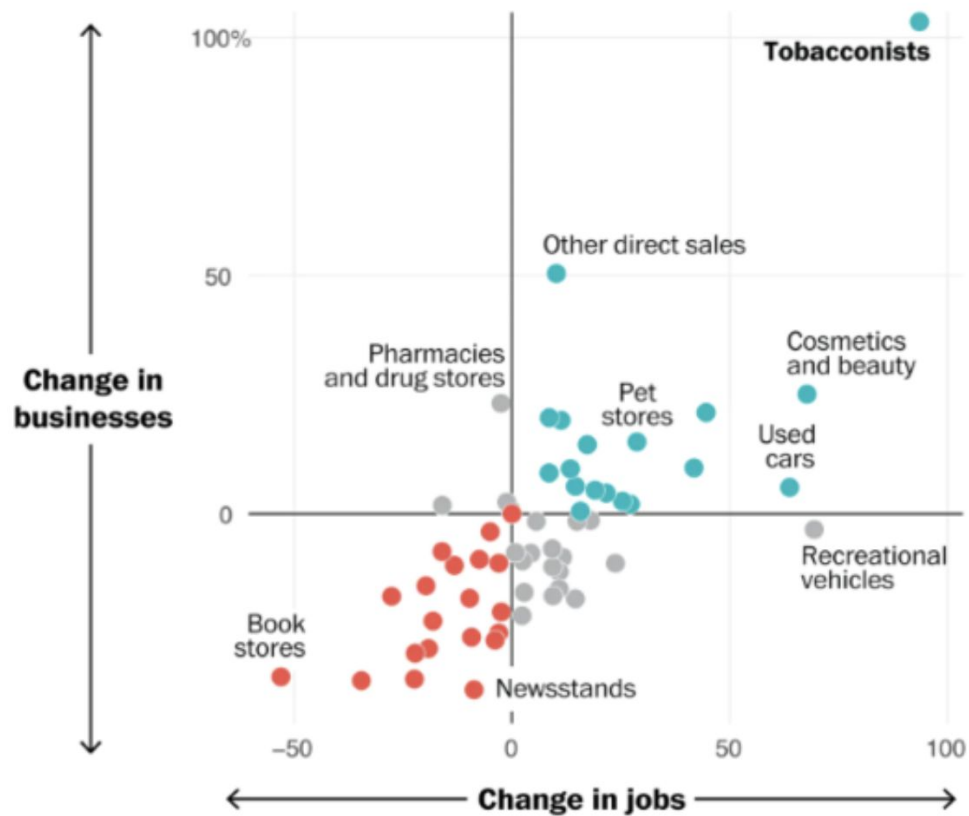
- What's the next surprise?
 - In late 2017, JUUL became a game changer
 - Until a month ago, most of us thought that biggest acute risk of use was an exploding battery

Employment at tobacconists, which include vape shops



Source: Labor Department's Quarterly Census of Employment and Wages THE WASHINGTON POST

Business and job growth in retail, 2009 to 2019



Source: Labor Department's Quarterly Census of Employment and Wages THE WASHINGTON POST



THANKS

Any questions?

You can find us at

- mstobaccodata.org

