

MYTHS AND FACTS ON VAPING



WHAT POLICYMAKERS
SHOULD KNOW





POLICY NOTE

Myths and Facts on Vaping: What Policymakers Should Know

Consumer Choice Center – Policy Note
By Yaël Ossowski and Bill Wirtz

SUMMARY

Creative entrepreneurs and innovators launched a category of nicotine delivery products called vaping devices (also known as e-cigarettes) to give people a less harmful method of consuming nicotine, the stimulant alkaloid smokers are actually addicted to. These devices heat up a mixture of liquid that is then inhaled, the byproduct being water vapor.

While the life-saving potential of nicotine vaping devices has been recognized by many public health authorities, several recent high-profile hospitalizations and illnesses have put vaping on trial, inviting scrutiny and calls for outright bans on the technology.

This policy note dispels the myths that surround vaping, offers factual scientific and health evidence, and gives recommendations to uphold public health all the while reducing harm.

Recommendations

- Enforce strict age restrictions for vaping devices and liquid at points of sale
- Invest in school education on the impact of nicotine on adolescent brains
- Keep vaping products legal as a harm reduction tools for adult smokers
- Vape flavors are a main draw for responsible adult vapers, and should remain legal

MYTH #1: VAPING IS MORE HARMFUL THAN SMOKING

Traditional cigarettes, when burned, create more than 7,000 chemicals, 69 of which have been identified as potential carcinogens.¹

Vape devices, on the other hand, contain completely different ingredients.

The two main ingredients used in vape liquids are propylene glycol (PG) and vegetable glycerin (VG), both used to form the vapor and add flavor to it. Added to these two ingredients is a third, usually a common food flavoring found in cakes, oils, and other food items that help give the vape liquid its taste. All of these aforementioned compounds are common food ingredients that are deemed healthy and safe by regulatory bodies including the FDA.²

The other variable ingredient in vape liquid is nicotine, the stimulant alkaloid. Though not all liquids contain this addictive chemical, it is widely seen as the main draw for former smokers looking to quit smoking. When compared to other alternatives in getting people to quit, including Nicotine Replace Therapy (NRT) patches and drugs, vaping has been found to be more effective.³

The U.K.'s top health body, Public Health England, has repeatedly said that vaping and e-cigarettes are 95 percent less harmful than smoking.⁴

The same conclusion has been drawn by the New Zealand Ministry of Health and Health Canada, which have both launched public initiatives imploring smokers to turn to vaping.⁵

Vaping has been proven to be 95% less harmful than smoking, and has been endorsed by international health bodies as a safer alternative.

¹ "What's in a cigarette – American Lung Association"

<https://www.lung.org/stop-smoking/smoking-facts/whats-in-a-cigarette.html>

² "Food Additive Status List – U.S. Food & Drug Administration"

<https://www.fda.gov/food/food-additives-petitions/food-additive-status-list>

³ "A Randomized Trial of E-Cigarettes versus Nicotine-Replacement Therapy – New England Journal of Medicine"

<https://www.nejm.org/doi/full/10.1056/NEJMoa1808779?query=TOC>

⁴ "E-cigarettes: an evidence update (2015) – Public Health England."

<https://www.gov.uk/government/news/e-cigarettes-around-95-less-harmful-than-tobacco-estimates-landmark-review>

⁵ "New Zealand Ministry of Health, Health Canada"

<https://www.odt.co.nz/news/national/new-ministry-health-site-launched-promote-vaping>
<https://www.canada.ca/en/health-canada/services/smoking-tobacco/vaping/smokers.html>

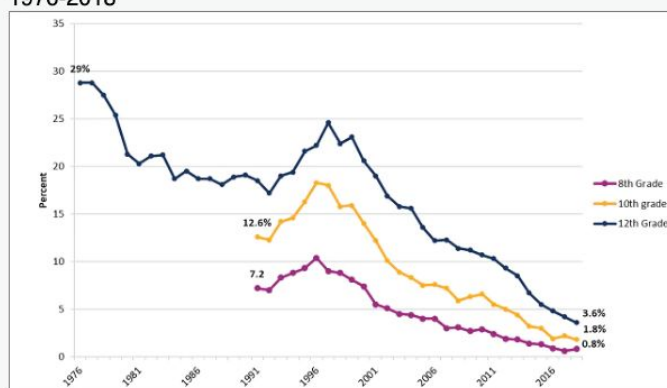
MYTH #2: THERE IS A TEEN VAPING 'CRISIS'

Less than 14% of U.S. adults are now smokers, the lowest rate ever recorded. This coincides with the lowest teen smoking rates in recorded history.⁶

For vaping, the latest CDC figures show that 20.8% of high schoolers have vaped at least once in the last 30 days.⁷ But nearly half of those were vaping cannabis rather than nicotine, usually products that were procured illegally.⁸

This is certainly a problem to address, but not a crisis as framed by public health officials. And considering no data was collected prior to 2015 on vaping overall, a collection of new data cannot be statistically concluded to warrant a crisis.⁹

Figure 1: 30 Day Prevalence of Daily Use of Cigarettes, by Grade, 1976-2018



Source: Johnston, L. D., Miech, R. A., O'Malley, P. M., Bachman, J. G., Schulenberg, J. E., & Patrick, M. E. (2019). *Monitoring the Future national survey results on drug use 1975-2018: Overview, key findings on adolescent drug use*. Ann Arbor: Institute for Social Research, University of Michigan. Retrieved from <http://www.monitoringthefuture.org/pubs/monographs/mtf-overview2018.pdf> - PDF.

We should not tolerate teen vaping and any rise in numbers is concerning, but we cannot at the same time deprive millions of adult smokers of alternatives because of activities that are already illegal. The same lessons have been learned from the counter-productive prohibition of alcohol in the 20th century.

The latest figures show 20.8% of high schoolers have experimented with vaping in the last 30 days. However, nearly half of those were vaping illicit cannabis cartridges that are usually bought on the black market.

⁶ "Current Cigarette Smoking Among Adults in the United States – Centers for Disease Control" https://www.cdc.gov/tobacco/data_statistics/fact_sheets/adult_data/cig_smoking/index.htm

⁷ "Results from 2018 National Youth Tobacco Survey" <https://www.fda.gov/news-events/press-announcements/results-2018-national-youth-tobacco-survey-show-dramatic-increase-e-cigarette-use-among-youth-over>

⁸ "Monitoring the Future Survey Results Show Alarming Rise in Teen Vaping – NIH" <https://www.drugabuse.gov/about-nida/noras-blog/2018/12/monitoring-future-survey-results-show-alarming-rise-in-teen-vaping>

⁹ "Key Findings on Adolescent Drug Use – The National Institute on Drug Abuse" <http://monitoringthefuture.org/pubs/monographs/mtf-overview2015.pdf>

MYTH #3: VAPING IS THE CAUSE OF RECENTLY REPORTED RESPIRATORY ILLNESSES

Much cause for concern of late has been a flurry of reports of illness and hospitalizations blamed on traditional vaping devices and liquids. The CDC has reported nearly 380 cases of lung illnesses related to vaping.¹⁰ Sensational headlines and opinion articles have convinced leaders in several states and even President Donald Trump to consider banning vaping flavors outright.¹¹

But careful analysis of the reported cases reveals that a vast majority of the patients with symptoms were found to have used illicit vape cartridges mixed with the cannabis compound THC.

A study in the *New England Journal of Medicine* that examined cases in Illinois and Wisconsin found that 84% of hospitalized patients report using illicit THC vaping cartridges prior to their illness.¹² No illnesses have yet been tied to store-bought vaping pods or liquids containing nicotine.

To that end, two Wisconsin brothers were recently arrested in connection with a multi-million dollar operation that mixed various chemicals (including Vitamin E) with THC in cartridges meant for vaping devices, which they then sold illegally. Authorities have identified this large scheme spread across much of the midwest as a culprit in the recent lung illnesses there.¹³

What this reveals is that illicit vaping products sold on black markets, rather than licensed retailers, have actually caused the most severe of the lung illnesses reported in the media.

As such, a ban on regulated devices and liquids, whether with flavors or not, would not address the problem as it currently exists.

The vast majority of reported illnesses associated with vaping have been caused by illicit cannabis vape cartridges sold on the black market, not those purchased legally in licensed retailers.

¹⁰ “Outbreak of Lung Disease Associated with E-Cigarette Use, or Vaping”

https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html

¹¹ “Trump Administration Plans to Ban Flavored E-Cigarettes – New York Times”

<https://www.nytimes.com/2019/09/11/health/trump-vaping.html>

¹² “Pulmonary Illness Related to E-Cigarette Use in Illinois and Wisconsin — Preliminary Report”

<https://www.nejm.org/doi/full/10.1056/NEJMoa1911614>

¹³ “Wisconsin man accused in illegal THC vaping cartridge scheme – Associated Press”

<https://www.apnews.com/50175c10378f408cb8912c4069034077>

MYTH #4: RESTRICTING VAPING FLAVORS WILL CURB USE BY MINORS

In response to the reported illnesses and hospitalizations tied in the media to vaping, policymakers have called for immediate bans on flavored vaping products, the first of which being Michigan.¹⁴

The main drive behind these proposed bans is protecting minors, who are allegedly drawn to the myriad of vape flavors. But considering all minors who use these products are acquiring them outside the legal market, it is clear that the most immediate impact will be on responsible adult vapers who prefer these flavors.

A legal and regulated market is the best method for rooting out bad products and actors. A ban on flavors will only drive those who wish to use flavored vaping products to the black market, or back to cigarettes. Recent studies have shown that if vaping products are outlawed, current vapers are more likely to return to smoking.¹⁵ That would be very consequential for public health.

The best deterrent to vaping by minors is to enforce strict age-restrictions at storefronts, much like exists with alcohol and tobacco products, as well as investing in education in schools on the effects of nicotine on adolescent brains.

Making products that are currently legal and available for adults illegal will cause more harm to both adults and minors, creating the incentives mentioned above that currently exist for the illicit market in vape cartridges containing cannabis and dangerous additives.

Bans on vape flavors will hurt responsible adult users who have used flavors to quit smoking. Vapers barred from purchasing vaping products will turn to unregulated and illicit products that would be more dangerous than existing products available in stores for adults.

¹⁴ “Michigan becomes first state to ban sales of flavored e-cigarettes – CNBC”

<https://www.cnbc.com/2019/09/04/michigan-bans-sales-of-flavored-e-cigarettes-restricts-vaping-marketin-g.html>

¹⁵ “Young adult dual combusted cigarette and e-cigarette users’ anticipated responses to hypothetical e-cigarette market restrictions – Journal of Substance Use & Misuse”

<https://www.tandfonline.com/doi/full/10.1080/10826084.2019.1626435?src=recsys&>

CONCLUSION

Contrary to the sensationalistic media reports, adults who use vaping and e-cigarettes as a means to quit smoking are vastly improving their chances of living long, healthy, and productive lives.

The innovations in harm reduction tools in recent years have produced vaping and e-cigarette products that are demonstrably less harmful than traditional cigarettes.

At the same time, the rise in use of these products by teens is cause for concern, but not at the risk of outlawing the entire category used by responsible adult former smokers.

Let's enforce existing laws. Nearly half of tobacco and vape shops don't ID young customers.¹⁶ This perpetuates the problem and has turned the public against vaping for consenting adults trying to improve their life expectancy.

In order to curb vaping by minors and illicit vaping products that are connected to recent illnesses, the Consumer Choice Center recommends the following:

Recommendations

- Enforce strict age restrictions for vaping devices and liquid at points of sale
- Invest in school education on the impact of nicotine on adolescent brains
- Keep vaping products legal as a harm reduction tools for adult smokers
- Vape flavors are a main draw for responsible adult vapers, and should remain legal

¹⁶ "Half of tobacco and vape shops don't ID teens, undercover research finds – WQAD"
<https://wqad.com/2019/06/24/half-of-tobacco-and-vape-shops-dont-id-teens-undercover-research-finds/>

About the authors



Yaël Ossowski ([@YaelOss](#)) is a consumer advocate and writer. He's currently deputy director for the Consumer Choice Center and has worked as a journalist and grassroots organizer with activists around the world for the last decade. He was previously Watchdog.org's Florida Bureau Chief, chief Spanish translator, and national investigative reporter from 2012-2015. He is also a contributor to Metropole Magazine in Vienna, editor of Devolution Review, and a member of the Society of Professional Journalists. He studied at Concordia

University in Montréal, the University of Vienna, and received a Master's Degree in Philosophy, Politics, Economics (PPE) at the CEVRO Institute in Prague. He lives between Charlotte, North Carolina and Vienna, Austria.



Bill Wirtz ([@wirtzbill](#)) is the senior policy analyst for the Consumer Choice Center, based in Brussels, Belgium.

Originally from Luxembourg, he publishes in German, French, and English. His work has appeared in major news outlets across the world, including Newsweek, Washington Examiner, Die Welt, Le Monde, Le Figaro, Le Soir, Les Echos or City AM.