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# **E-cigarettes and Public Health**

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### **HIGHLIGHT**

Cigarette smoking has killed millions of Americans, yet, in recent years, novel tobacco harm reduction products, e-cigarettes and vapor products, have shaken up the marketplace, leading to significant declines in combustible cigarette use. Despite this, lawmakers and regulators are being influenced by billionaires that will stop at nothing to see the end of e-cigarettes in America, regardless of their significantly reduced harm. Public health should be promoting the use of tobacco harm reduction products, not stunting adult access to these innovations.

### INTRODUCTION

Each year, 480,000 Americans die from smoking-related diseases and illnesses.

The smoking epidemic cost \$891 billion in 2020. Fortunately for American adults who are unable or unwilling to quit consuming nicotine, alternatives to combustible cigarettes exist that provide adults with adequate levels of nicotine without the harms associated with combustible cigarettes. These products include electronic cigarettes (e-cigarettes) or vapor products, heated and smokeless tobacco products, and nicotine pouches.

Unfortunately, public health and billionaire-backed nanny state organizations continue to ignore mounting evidence of e-cigarettes' efficacy in helping adults both quit smoking and maintain cessation. Further, opponents continue to suggest there's a crisis of youth vaping in an effort to block adult access to alternatives to smoking.

In other countries, public health agencies actively promote adult use of e-cigarettes as a tobacco harm reduction product. But in America, e-cigarette companies face draconian regulations that have made it impossible to legally provide these safer tobacco products to consumers. In fact, as of October 2022, only three companies have been authorized by the U.S. Food and Drug Administration (FDA), which regulates all tobacco and vapor products, to produce and sell e-cigarette products.

### WHY YOU SHOULD CARE

E-cigarettes or vapor products have completely transformed tobacco harm reduction. Numerous public health bodies find them to be significantly less harmful than combustible cigarettes and their use correlates with historic declines in youth and young adult smoking in America. Despite this, access to these tobacco harm-reduction products is being threatened.

Billionaires Have Invested Millions To
Prevent Adult Access: Former New York City
Mayor Michael Bloomberg funded a\$160
million campaign to ban flavors in e-cigarettes.
Adults are actively being blocked from accessing safer alternatives due to his efforts.

Youth Vaping Is Declining: Despite the headlines, youth vaping peaked in 2019 and has steadily declined in the years since. Between 2019 and 2022, vaping among American youth halved from 5.3 million to 2.55 million. Even better, youth vaping has not led to an increase in smoking rates.

### **FDA Regulations Have Killed Small**

**Businesses:** The process to legally market e-cigarettes in America is extremely costly, and the FDA has indicated it will not authorize flavored e-cigarette products. This does not stop illicit products from countries like China from being sold in America but prevents American small businesses from selling safe and regulated products to adults who are unable to quit.

### E-CIGARETTES ARE STILL SIGNIFICANTLY SAFER

Cigarettes contain nearly 700 ingredients and, when ignited, create over 6,000 toxic chemicals. It is the smoke that is inhaled that causes smoking-related diseases

Electronic cigarettes consist of a battery which heats a liquid containing usually five ingredients (water, propylene glycol, vegetable glycerine, nicotine, and flavoring), that produces an aerosolized vapor, which is significantly less harmful than toxic cigarette smoke.

Numerous public health bodies and institutions have examined decades-long studies on the health effects of e-cigarettes finding them to be a viable, safer substitute to combustible cigarettes, including:

• Public Health England: In 2015, a landmark report relying on 185 studies and produced by PHE (a leading health agency in the United Kingdom), found "that using [e-cigarettes is] around 95% safer than smoking," and that their use "could help in reducing smoking related disease, death and health inequalities." In 2018, the agency reiterated its findings, remarking that vaping is "at least 95% less harmful than smoking." In 2022, PHE found that "vaping poses a small fraction of the risks of smoking" and that "the 'at least 95% less harmful' estimate remains broadly accurate."

- The Royal College of Physicians (RCP): In 2016, RCP found the use of e-cigarettes and vaping devices "unlikely to exceed 5% of the risk of harm from smoking tobacco." RCP is another United Kingdom-based public health organization, and the same group that was the first to highlight the link between smoking and lung cancer, and other tobacco-related diseases in 1962.
- The National Academies of Sciences, Engineering, and Medicine: In January 2018, the academy noted "using current generation e-cigarettes is less harmful than smoking."

and warned, "Studies have found that policies intended to restrict e-cigarette use may have unintentionally increased cigarette smoking."

## THE ANTI-VAPING CAMPAIGN IS NOT BASED ON SCIENCE

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- Cochrane Review: Researchers at the Tobacco Addiction Group analyzed studies that examined the effects of e-cigarettes in helping smokers quit. The researchers found 61 studies that had over 16,700 adults that had smoked and compared the effectiveness of various harm-reduction products including e-cigarettes, nicotine replacement therapy, behavioral support, and others. The report found e-cigarettes to be more effective than nicotine replacement therapy or non-nicotine cigarettes.
- Society for Research on Nicotine and Tobacco (SRNT): An article in August 2021, co-authored by 15 past presidents of the SRNT, reported that "Many scientists have concluded that vaping is substantially less dangerous than smoking." Furthermore, they found that "A growing body of evidence indicates that vaping can foster smoking cessation"

Formaldehyde: The untrue talking point that e-cigarette vapor produces formaldehyde stems from a bogus 2015 New England Journal of Medicine article titled "Hidden Formaldehyde in E-Cigarette Aerosols." The researchers used blatantly biased techniques to produce the formaldehyde levels, including overheating the e-cigarette. However, when a different set of researchers recreated the study using normal conditions mimicking how vapers actually use the device, formaldehyde was at levels "far below what [cigarette] smokers inhale." The authors of the 2015 study made no mention of the significantly higher levels of formaldehyde produced by combustible cigarettes.

The Bloomberg-funded Campaign for Tobacco-Free Kids (CTFK) uses similar tactics. The organization's "What Parents Need to Know," webpage states that e-cigarettes "also expose users to harmful and carcinogenic chemicals such as formaldehyde," while failing to mention how formaldehyde is produced.

Popcorn Lung: Popcorn lung scaremongering is similar to the formaldehyde deception.

A 2015 study published in Environmental Health Perspectives noted e-cigarette liquids contain chemicals such as diacetyl, which are used to produce "buttery" flavors. The researchers heavily associated their findings to studies of popcorn factory workers, who experience heavy inhalation exposure to flavorings containing diacetyl, and are susceptible to the fatal condition known as popcorn lung.

Once again, the popcorn lung pseudo-study relied on vaping conditions far above normal levels, which produced erroneous results. Moreover, the authors of the study failed to mention combustible cigarette smokers are exposed to 750 times more diacetyl in tobacco cigarettes than in e-cigarettes. To date, there have been no known cases of popcorn lung in smokers.

The American Lung Association, which has also received funding from billionaire Michael Bloomberg to campaign against e-cigarettes, has a webpage devoted to popcorn lung misinformation and pays no attention to the amount of diacetyl found in combustible cigarettes.

**Flavors:** Another misperception most often touted by e-cigarette opponents is that flavors are only meant to attract youth, when, in fact, flavors in vapor products play an important role in helping adults both switch from combustible cigarettes to a safer alternative and remain smoke-free.

A 2018 survey examined nearly 70,000
American adult vapers, with 95 percent reporting having ever smoked. The survey found that the "majority had quit smoking." Among all participants, 83.2 percent and 72.3 percent reported vaping fruit and dessert flavors, respectively. A 2019 user survey found

that fruits, candy, dessert, and beverage flavors were preferred across all age groups and that less than 5 percent of vapers preferred tobacco-flavored e-cigarettes.

A 2020 cohort study of nearly 18,000 participants found that "adults who began vaping non tobacco-flavored e-cigarettes were more likely to quit smoking than those who vaped tobacco flavors."

Flavors are also not cited by youth as the main reason for using e-cigarettes. According to the **2021 NYTS**, among middle and high school students that were currently using e-cigarettes, 43.4 percent had vaped because they were "feeling anxious, stressed, or depressed" compared to 13.2 percent who cited flavors.

### BILLIONAIRES ARE BLOCKING ADULT ACCESS TO TOBACCO HARM REDUCTION PRODUCTS

Former New York City mayor Michael Bloomberg has long advocated against combustible cigarettes, yet in recent years, he has pivoted toward preventing the sale of e-cigarettes, funneling money into various organizations and backing taxes on e-cigarettes and flavor bans, despite flavors being useful in helping adults quit.

For example, since at least 2006, the Campaign for Tobacco-Free Kids has received millions of dollars from Bloomberg to launch campaigns against both tobacco and vapor products. In 2019, Bloomberg Philanthropies launched a \$160 million campaign with CTFK with the sole intention of "banning all flavored e-cigarettes" even for adults trying to quit combustible cigarettes. Their main strategy is to target parents with terrifying and false messages about the "out-of-control" youth "vaping epidemic" and to promote the popular myths of harms related to youth vaping.

The CDC supports this effort to scare parents. In fact, in October 2022, the agency held a **closed-door meeting** with anti-vaping activists and decried the fact that there was still a youth vaping epidemic, despite youth vaping declining by half between 2019 and 2022.

### YOUTH VAPING IS DECLINING

According to the National Youth Tobacco Survey, between 2019 and 2022, vapor product use declined by 48.7 percent among high schoolers and by 68.6 percent among middle schoolers. In fact, there were an estimated 2.75 million fewer youth vapers in 2022 than in 2019.

According to the BRFSS, in 2021, 7.4 percent of adults aged 18 to 24 years old were current smokers. This represents a 22.5 percent decline from 2020 when 9.6 percent of young adults were currently smoking. Since 2018, when the U.S. surgeon general declared a youth vaping epidemic, young adult smoking rates have decreased by 40.7 percent, with an average annual decline of 15.8 percent.

The declines are remarkable. In 1995, when the CDC first began monitoring smoking using the BRFSS, 22.4 percent of 18 to 24 years old were current smokers. Between 1995 and 2021, current young adult smoking has decreased by 66.9 percent.

While youth vaping peaked several years ago, it is evident that the introduction of e-cigarettes has led to remarkable declines in combustible cigarette use. When determining the fate of e-cigarette products, public health and lawmakers must rely on sound and factual data.

Despite that promising data, the CDC continues to demonize e-cigarettes, and e-cigarette opponents, including Bloomberg-funded organizations, falsely claim youth e-cigarette use leads to subsequent cigarette use. At the same time, the CDC admits that young adult smoking rates are at their lowest levels ever. Moreover, the introduction of e-cigarettes to the marketplace correlates with significant declines in young adult smoking.

Since 1995, the CDC has been tracking adult health indicators, including smoking status, through the Behavioral Risk Factor Surveillance System survey (BRFSS), an annual survey of American adults. The data includes information on smoking status, including current and/or former, age, gender, income, and educational attainment. The data, especially among young adults, indicate that the introduction of e-cigarettes has led to remarkable declines in smoking rates.

Among youth, 2022 data is unavailable, but nationally, there have not been increases in youth cigarette smoking. According to the NYTS, in 2021, only 8 percent of middle and high school students reported current use of combustible cigarettes. This was a 43.7 percent decline from 2019 when 14.2 percent of middle and high schoolers were currently smoking.

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# THE FDA IS HINDERING ACCESS TO HARM REDUCTION

In 2010, the FDA was granted authority to regulate e-cigarettes products as tobacco

products, which subjects manufacturers to a host of requirements including annual registrations, ingredient listings, and the eventual premarket tobacco product application (PMTA).

The PMTA process has been called a "bureaucratic nightmare" and has effectively shuttered thousands of small businesses across the country. In 2020, all manufacturers of tobacco products were required to submit a PMTA at, according to an FDA estimate, a cost of \$330,000 per product. Naturally, many manufacturers could not afford the costs of a PMTA.

While the FDA claims flavors are only attractive to youth, adults rely on flavored products as well—to both quit smoking and remain smoke-free. A 2020 study found an association between flavors and smoking cessation. In a cohort study of more than 17,900 participants, the authors found that "adults who began vaping non-tobacco-flavored e-cigarettes were more likely to quit smoking than those who vaped tobacco flavors."

Since their introduction, e-cigarette have helped millions of American adults quit

Parents deserve better! Youth vaping has declined precipitously since peaking in 2018-2019, and there has not been an increase in combustible cigarette use among young adults. E-cigarettes have helped to accelerate significant declines in smoking among youth and young adults.

In September, 2021, the FDA swiftly denied nearly 1 million applications for non-tobacco flavored e-liquid products, and to date, the agency has only approved 23 product applications from three manufacturers, all for only tobacco-flavored products.

In July 2022, FDA Commissioner Robert Califf announced an independent evaluation of the Center for Tobacco Products (CTP) to be conducted by the Reagan-Udall Foundation, a nonprofit that oversees the FDA. In comments to the independent review board, one FDA staff member revealed that the agency relies on everything but the science when issuing or, more likely, denying authorization orders for e-cigarette products. Another FDA staff member even disclosed to the board that "[p]olitics are being permitted to drive the science and even limit or alter science-based decisions" and went on to compare the process to "fixing a leaky faucet on the Titanic as it sinks." According to this FDA employee, "[t]oo much time is spent on 'managing' public perception rather than doing the job that needs doing."

smoking combustible cigarettes. Yet, despite these declines, policymakers and regulators continue to challenge adult access to alternatives to smoking and they are lying to parents about youth vaping to get them to demand that e-cigarettes and flavored vape liquids be removed from the marketplace.

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A misinformation campaign funded by outof-touch billionaires threatens adult access to e-cigarettes. Policymakers and regulators must rely on science and not outside political pressure in order to ensure American adult consumers have access to regulated e-cigarette products that can help them quit smoking and remain smoke-free. This includes authorizing non-tobacco flavored e-cigarette products, which are effective among adults who smoke.

### WHAT YOU CAN DO

### **Get Informed**

Learn more about e-cigarettes' potential health impacts and organizations fighting against the false narrative. Visit:

- American Vapor Manufacturers
- Consumer Advocates for Smoke-Free Alternatives Association
- Taxpayers Protection Alliance

#### **Talk to Your Friends**

Help your friends and family understand these important issues. Share this information, tell them about what's going on and encourage them to join you in getting involved.

### **Become a Leader in the Community**

Start an Independent Women's Network chapter group so you can get together with friends each month to talk about a political/policy issue (it will be fun!). Write a letter to the editor. Show up at local government meetings and make your opinions known. Go to rallies. Better yet, organize rallies! A few motivated people can change the world.

### **Remain Engaged Politically**

Too many good citizens see election time as the only time they need to pay attention to politics. We need everyone to pay attention and hold elected officials accountable. Let your Representatives know your opinions. After all, they are supposed to work for you!

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