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# Vape wars: The fierce debate over the banning (and unbanning) of Juul e-cigarettes

Both e-cigarettes and combustible tobacco products fulfill one primary function: They're incredibly efficient delivery systems for nicotine.

By **Seth Mnookin** Updated August 10, 2022, 9:26 a.m.



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If you were trying to create a villain that embodied the worst fears of youth-focused, anti-

smoking activists, it would be hard to top Juul, the e-cigarette company that launched in 2015. Juul's early growth was [fueled by ad campaigns on child-oriented TV channels](#), including Nickelodeon and Cartoon Network, and on websites aimed at middle school students. It infiltrated summer camps and schools in what a US House of Representatives subcommittee [called a "sophisticated program"](#) to target teens and children. Its flavored products [delivered higher doses of nicotine](#) in smaller, easier-to-conceal packages than other vaping products. And it's owned in part by Altria, the successor to Philip Morris, which for half a century schemed to deceive the public about the true dangers of smoking.

Combine all of that with Juul's name-brand recognition — at one point it controlled more than 70 percent of the American vaping market — and it's easy to see why the company was a prime target for politicians, pediatricians, and concerned parents. In June, the Food and Drug Administration announced it was [banning the sale of all Juul products](#), saying the company "played a disproportionate role in the rise in youth vaping." Parents Against Vaping E-cigarettes hailed the decision as "an enormous step forward in our fight to protect our kids."

But that seeming victory was short-lived: In early July, the FDA [switched course and put a temporary stay](#) on its order so it could further investigate unspecified "scientific issues." That decision, perhaps counterintuitively, was celebrated by a less vocal but growing group of tobacco researchers and public health officials who believe that e-cigarettes can help save the lives of current smokers.

The reactions to those two moves — first banning Juul to combat youth vaping and then reversing course to further study the science — represent an unprecedented division in the field of tobacco control. On one side are those who focus on vaping's effects on young people and its potential role in creating a new generation of nicotine addicts; on the other are those concerned that headline-grabbing fears about vaping are obscuring its potential as a harm-reduction tool.

“I’ve been in the field of tobacco control and research for 45 years,” says [Kenneth Warner](#), a former president of the Society for Research on Nicotine and Tobacco, a former dean of the University of Michigan School of Public Health, and a founding board member of the youth-focused, anti-tobacco nonprofit known today as the Truth Initiative. “I’ve never seen a division like this. Even using a phrase like ‘tobacco harm reduction’ gets the hackles up of the people focused on kids. They think it’s a distraction. And obviously, they’ve been winning the day.”

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E-cigarettes and combustible tobacco products both fulfill one primary function: They’re incredibly efficient delivery systems for nicotine. On its own, nicotine is mostly dangerous because of how addictive of a stimulant it is.

There are important caveats: Use of nicotine by pregnant people has been shown to increase the likelihood of fetal birth defects and can harm infant brain development. Like other widely used stimulants, including caffeine, it may also have some effect on adolescent brain development. There is not, however, persuasive evidence that nicotine causes brain damage, as is sometimes claimed. The American public essentially conducted a massive experiment on this very subject in the mid-1960s, when [52 percent of men and 34 percent of women smoked](#). In the decades following, there was no evidence that similar proportions of the total population had become brain damaged.

In reality, the negative effects of consuming nicotine are overwhelmingly related to how it gets into your bloodstream. With combustible products like cigarettes, this occurs when you inhale burning tobacco smoke into your lungs. That smoke also contains tar, carbon monoxide, and a number of known carcinogens. It’s all that other stuff — essentially, everything *but* nicotine — that is the primary reason cigarettes are the leading cause of preventable death, both in the United States and around the world. (The Centers for Disease Control and Prevention estimates that cigarettes are responsible for approximately 20 percent of all deaths in the United States — more than 480,000 a

year.)

E-cigarettes deliver nicotine by atomizing liquid solutions to create a mist. This vapor also contains a range of chemicals. Vapes haven't been on the market long enough for the health effects of some of those chemicals to be fully understood. But one thing is clear. [Study](#) after [study](#) after [study](#) has confirmed what the National Academies of Sciences, Engineering, and Medicine concluded in [a massive report](#) on the public health consequences of vaping: "Substituting e-cigarettes for combustible tobacco cigarettes reduces users' exposure to numerous toxicants and carcinogens present in combustible tobacco cigarettes."

A significant body of evidence showing vaping is less harmful than smoking has not deterred those in the anti-nicotine space from their campaign against vaping. As the American Lung Association's Erika Sward put it to me, "Are we talking about the difference between jumping out a twenty-story versus an eight-story window?" Sward was equally dismissive of the potential benefits of vaping for cigarette smokers looking to cut down or quit: "We've never bought into e-cigarettes as either a cessation product or a harm-reduction tool in the way the industry has tried to sell it."

But the scientific evidence showing the efficacy of vaping as a harm-reduction tool is not being produced by industry hacks: There's a growing body of research showing a correlation [between e-cigarette use and smoking cessation](#), as well as [multiple studies](#) showing that combustible cigarette smoking decreases when smokers take up vaping. (Health authorities in other parts of the world, including the United Kingdom, explicitly endorse using e-cigarettes to quit smoking.) There's also [evidence from a randomized clinical trial](#) that vaping is almost twice as effective for smoking cessation than FDA-approved nicotine replacement therapies such as nicotine gum, lozenges, or patches.

So why aren't more people speaking out about the potential of e-cigarettes to help current smokers? One possible answer lies in the political clout of the communities most

affected. Cigarette smokers are, on the whole, poorer, more likely to have mental health issues, and more likely to come from marginalized groups than nonsmokers.

Youth vaping, on the other hand, cuts across socioeconomic lines. Parents Against Vaping E-cigarettes, whose leaders have testified before Congress and met with former president Donald Trump, was cofounded by the mother of a ninth-grader at a \$56,000-a-year Manhattan private school.

As the headline on [an excerpt in \*Bloomberg Businessweek\*](#) from *The Devil's Playbook*, Lauren Etter's book about Juul, put it, "Juul Finds Hell Hath no Fury Like an Army of Really Rich Parents."

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None of this is to say that the rise in youth vaping isn't cause for real concern. According to the CDC, the percentage of high school students who reported vaping at least once in the previous 30 days jumped from [1.5 percent in 2011](#) to [almost 20 percent in 2020](#).

But scratch the surface a little and those numbers don't look quite as ominous. For one thing, despite fears that the spike in vaping would lead to a similar increase in nicotine addiction, the overall use of nicotine products among high schoolers didn't change substantially during those years: It was [24.2 percent in 2011](#) and [23.6 percent in 2020](#). But as vaping was on the rise during that time, there was actually an unprecedented *drop* in the number of high schoolers who were smoking cigarettes, from [15.8 percent](#) to [4.6 percent](#).

Of the high schoolers who do use e-cigarettes, habitual nicotine consumption is lower compared with their cigarette-smoking peers, who are almost twice as likely to be daily users, according to the most recent data from a long-term University of Michigan [survey](#) on adolescent drug and alcohol use.

Finally, keeping vaping products away from teens who want to use them could have the unintended consequence of nudging them toward cigarettes. A [2015 study](#) found that

“[a]cross the board . . . reducing e-cigarette access increases smoking among 12 to 17 year olds,” and [a recent study in \*JAMA Pediatrics\*](#) found that a 2018 ban on flavored tobacco products in San Francisco “was associated with higher odds of self-reported recent smoking among minor high school students.”

But as the debate over e-cigarettes becomes more pitched, those reports are oftentimes brushed aside. Increasingly, the battle over youth vaping looks like a disturbing number of modern-day disputes, where the combatants can’t even agree on the underlying facts. This is partly due to the legacy of low-tar and low-nicotine cigarettes being [falsely advertised](#) as less dangerous alternatives for smokers: The lingering memory of those efforts has led some public health officials to react to any discussion of “safer” tobacco products with the fury of a bull charging a flag-waving matador. Juul’s early marketing techniques understandably enraged people as well. But the bigger factor probably has to do with a lesson I learned in my years writing about childhood vaccination: It’s difficult to discuss what’s best for kids without emotion taking over.

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As the parent of a 12-year-old and a 10-year-old enrolled in a K-8 public school where I’ve witnessed kids vaping, I get the win-at-all-costs approach to e-cigarettes. The alternative for these kids “isn’t breathing smoke from cigarettes,” says Dr. Jonathan Winickoff, a pediatrician at Massachusetts General Hospital and longtime tobacco researcher, who has seen a significant increase in vaping among his patients. “It’s breathing clean air, which is what our lungs were designed to do.” Amen.

But as someone who studies the effects of misinformation — and as a former teen who grew up in the era of the reductive and counterproductive “Just Say No” anti-drug campaign — I’m even more concerned about the effects of anti-vaping efforts that ignore reality. Even without the Internet, it wasn’t hard for me to figure out that smoking a single joint wouldn’t scramble my brain like an egg, a fact that likely played a role in my downplaying the effects of habitual drug use. ([Multiple studies](#) have since shown that

the “Just Say No” fear-based approach [doesn't work.](#))

We're seeing a repeat of that type of overwhelmingly negative messaging today: [One recent survey](#) reported that more than twice as many articles discussed the risks of e-cigarettes than mentioned that they're less harmful than cigarettes. (In 2019, a handful of deaths overwhelmingly due to illegal THC vaping cartridges were incorrectly attributed to e-cigarettes.) The real-world effects of that coverage are now clear. A [just-published study](#) in the *American Journal of Preventive Medicine* found that 64 percent of Americans believe vaping is either more than or equally as harmful as smoking cigarettes; the percentage who believe that vaping is more harmful than cigarettes increased fourfold between 2018 and 2020. Dismayingly, just 11.4 percent of people believe, correctly, that e-cigarettes are less harmful.

The consequences of those misconceptions are as predictable as they are depressing: Exclusive cigarette smoking almost doubled between 2019 and 2020 among people who believe that vaping is more harmful than smoking, a finding that, as the authors of the study delicately put it, “suggest[s] the need for accurate messaging of relative and absolute product risks.”

New York University's Jennifer Cantrell is one of the rare researchers who sees both sides in this debate: She studies population-level media messaging about tobacco health risks and is a former managing director at the Truth Initiative, which has taken a hard line against vaping. It's worrying that so much effort is focused on abstinence, she says: “We should be dedicating resources toward prevention but we also need to be clear about the relative risks that we do know about for a younger population.”

It seems unlikely that that will happen anytime soon. According to Kenneth Warner, discussions about public health and vaping have become “almost like politics: Everybody is absolutely wedded to their own views and they're not open to being convinced otherwise.”

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