



How the U.S. Spreads Fake Vaping Fears

Michelle Minton • July 21, 2020



The international health profession is rightly focused on the SARS-CoV-2 virus threat at the moment.

Meanwhile, another multinational threat has

insidiously spread: Alarmism about nicotine vapor

products (aka e-cigarettes) has infected a growing number of governments around the world, causing authorities to eschew science, logic, and human nature. Out of blind panic, they are disregarding the indisputable evidence that giving smokers legal access to nicotine vapor can save millions of lives. Instead, they embrace prohibitionist policies that will keep people smoking and dying. The main culprit behind spreading this mass psychosis is, sadly, the United States.

I have written extensively about agencies, health charities, and activists who have orchestrated the campaign of fear and doubt around e-cigarettes—products that even notorious anti-vaping advocates, like University of California San Francisco Professor Stanton Glantz, admit are substantially less toxic than smoking. I and others have dissected the financial and professional benefits that drive the campaign to ban nicotine vapor products even while deadly cigarettes remain freely available. Here, I will discuss the methods by which these entities cultivate and export e-cigarette alarmism worldwide.

The three main players in the tragicomedy public discourse on e-cigarettes are: representatives of government agencies, public health activists, and the media. The media has acted mostly as a megaphone for government agencies and activists, parroting and amplifying the narrative disseminated by government actors and activists. This post will focus primarily on how anti-tobacco activists, in and outside of government, created and sold those narratives.

Statistical Sleights of Hand

Authorities in the U.S. have become pioneers in the art of statistical hocus pocus. They managed to transform limited evidence about shifting trends in vaping among young people into supposed proof of a full-blown nicotine-use crisis. And, like any good magician, performing this trick often involves misdirection. In the case of statistics, such misdirection is often achieved by:

- Focusing on the scariest-sounding data;
- Using the scariest language to describe data; and
- Ignoring or downplaying details that put the data in a less scary context.

A good example is the way government, media, and anti-vaping activists used the results of the 2018 National Youth Tobacco Survey (NYTS), a survey of middle and high school students, administered annual by the Centers for Disease Control and Prevention.

Months before the 2018 NYTS data were made public, the Food and Drug Administration (FDA) announced that the results showed youth vaping had become an “epidemic.” The media repeated the information, as dictated by the FDA, over and over again so that, by

the time results were actually released, it hardly mattered what the survey really showed. The narrative had been set in the public mind: Teens were now vaping nicotine in epidemic proportions. Of course, once researchers were finally able to analyze the data, they found little more than smoke and mirrors.

Highlight the scariest data. Media outlets from Fox News to National Public Radio ran headlines with some variation of the talking point that between 2017 and 2018 youth vaping had doubled and now one in five youth were users of nicotine vapor products. This generated public concern and interest in solving the problem, which, of course, was the goal.

What neither the FDA nor the media highlighted, however, was that this data point only referred to the number of students who reported *any* vaping in the 30 days prior to the survey. While it could mean some of those youth were vaping nicotine every day, it also meant some portion may have only vaped once, perhaps for the first time, and never again. That's what a later examination of the data found. The vast majority of youth who reported "vaping" on the NYTS did so on a handful of days. In fact, less than 1 percent of underage students who never smoked reported vaping regularly.

Use scary language. In 2017, 11.7 percent of students reported any past-month use of e-cigarettes in the NYTS. In 2018, that number rose to 20.8 percent, a 9 percent increase year over year. But a 9 percent increase in youth vaping just doesn't sound as scary as youth vaping "doubled." Again, that's the point. The use of relative versus absolute numbers is often employed specifically to make something appear more important.

Downplay mitigating details. Within weeks of the FDA's announcement, the existence of a youth vaping epidemic took on the status of indisputable truth. And the matter of how e-cigarettes impact youth health eclipsed considerations about the products' potential benefits for adults and the hazards that always accompany any sort of prohibition. The national survey had, after all, shown a doubling in the numbers with over 20 percent of students (one in five) now vaping nicotine. Except, in addition to ignoring the fact that most youth were not vaping regularly, both the FDA and the media ignored the fact that the survey did not say *what* youth were vaping.

The NYTS questionnaire asked students about their use of “e-cigarettes,” which it describes as “battery powered devices that usually contain a nicotine-based liquid that is vaporized and inhaled.” However, researchers have found that most of the students who report “vaping” on surveys about e-cigarettes don't use nicotine. For example, a study from 2016 found that approximately 65 percent of the 12th, 10th, and eighth grade students who used e-cigarettes reporting using “just flavoring” without nicotine. More recent research indicates that a substantial portion of youth who report “vaping” also use cannabis. In fact, 50 percent of students who reported any e-cigarette use and 70 percent of those who reported frequent use on NYTS also said they had used marijuana in e-cigarettes.

Arguably the most important detail ignored in panic over youth vaping was the fact that, despite fears about vaping leading to smoking, youth smoking rates were continuing to decline. In fact, the rate of smoking among both adolescents and adults hit a record low in 2018 and have continued to decline since. But the FDA and most media outlets paid little attention to the details about how often youth were vaping, what

they were vaping, and what effect it might be having on health because these details might not produce the same level of alarm as the idea of an “epidemic,” which again, is the point. And it worked.

Over the following years, not a day would pass without some new headline about the problem of youth vaping, the evil e-cigarette companies targeting teens, or the need for authorities to do *something*. As a result, counties and states have begun to prohibit e-cigarettes, the federal government raised the national minimum tobacco purchasing age to 21, banned non-tobacco flavors for pre-filled vaping devices, and is currently considering a bevy of additional restrictions to make these products less attractive, harder to obtain, and more expensive for adult smokers. Given that e-cigarettes, particularly flavored e-cigarettes, are the most effective means of helping smokers quit smoking, this should not be hailed as a victory. But, at least among those morally opposed to nicotine use, it was. Now they are seeking to export that “successful” strategy to the rest of the world.

American Panic Down Under

Despite the irrefutable evidence that non-combustible forms of nicotine are vastly safer than combustible tobacco, a long and growing list of countries now ban the sale, importation, or even possession of such products, like India, Brazil, Thailand, Singapore and Uruguay. Whenever the debate about such bans arises in any new country, invariably it is followed by attempts to infect that debate with American-style vape panic.

A recent example has unfolded in Australia over the last few months, where, though nicotine vaping is banned, the country’s estimated

300,000 vapers have managed to skirt the prohibition by having nicotine shipped from overseas. This June, however, Health Minister Greg Hunt threatened to close that loophole by banning the importation of nicotine beginning in July—weeks before Parliament returned from their summer holiday. The justifications for the ban were the youth vaping “epidemic” in America, rising incidence of nicotine poisoning in Australia, and increases in vaping among young adults.

Highlight the scariest data with the scariest language. In announcing his proposed ban, Hunt pointed both to the “78 percent increase” in youth vaping in the United States and a claim that nicotine poisonings in Australia had doubled since 2018, which according to him, was caused primarily by “imported products of dubious quality and safety.” Never mind that the only reason Australians must import nicotine of dubious quality is *because* the country banned nicotine vaping. The relative language Hunt uses about poisonings certainly sounds scary. But, as you might guess, the absolute numbers seem far less dire.

Downplay mitigating details. The source for Hunt’s claim comes from the Victorian Poisons Centre, which as Hunt noted in a press release, reported 21 cases of nicotine poisoning in 2018 and 41 cases in 2019. A look at the data for 2018 (2019 is not yet publicly available) shows that there were actually 100 calls made to the Centre related to “antismoking products,” which it defines as nicotine gum, lozenges, patches, Chantix, and e-cigarettes. What this means, assuming Hunt’s figure is correct, is that while 21 calls were related to e-cigarettes, 79 calls were related to other products. To put that in panic-speak, products that are legally sold over the counter in Australia caused

almost four times as many poisonings as e-cigarettes, which Hunt wants to ban.

Thanks to backlash from vapers around the world, as well as members of his own government, Hunt was compelled to back away from his proposed ban, at least temporarily. But this seems to have inspired anti-vaping advocates to try harder in copying successful, panic-inducing tactics employed in the United States. Most recently, it appears they are trying to replicate exactly the slight of hand American activists pulled off with the 2018 NYTS.

When All Else Fails: Lie

On July 16, the Australian Institute of Health and Welfare released the 2019 results of their national survey on drug use, which is conducted every three years. According to news reports, like this one in *The Guardian*, it found that e-cigarette use among young Australian non-smokers had quadrupled since 2013! Furthermore, a shocking 65 percent of adolescents and 39 percent of young “report using e-cigarettes despite having never smoked.” As is the point, stories like this are sure to shock Australians and spur efforts to keep or even strengthen the country’s nicotine vaping ban to get this problem under control. Of course, as with the youth vaping “epidemic” in America, the problem doesn’t exist; it’s statistical hocus pocus.

The data released by the Australian Institute of Health and Welfare is, admittedly, confusing. So, it is at least possible that the author of *The Guardian* article simply erred in stating that 65 percent of non-smoking adolescents reported “vaping.” Nonetheless, this isn’t just misdirection; it’s outright wrong. What the data show is that among the respondents who said they had ever used an e-cigarette in their life, almost 65

percent of those aged 14 to 17 said they were non-smokers at the time they first tried an e-cigarette (table 2.27.) First, this doesn't mean they were "never smokers," only that they hadn't smoked more than 100 cigarettes in their lifetime, nor does it mean they continued using an e-cigarette. The survey, in fact, indicates that only 8 percent of youth, aged 14 to 17, ever tried an e-cigarette (table 2.19), and among all respondents who ever tried an e-cigarette, most—87 percent—tried it only once or twice and never again (table 2.28). So, how many non-smoking youngsters in Australia are actually *currently* "vaping?" From what the survey reveals, almost none.

Age group	2016	2019
14-17	*0.8%	*1.3%
18-24	*2.0%	2.9%

* Estimate has a relative standard error of 25% to 50% and should be used with caution.

** Estimate has a high level of sampling error (relative standard error of 51% to 90%), meaning that it is unsuitable for most uses.

Statistically significant change between 2016 and 2019.

n.p. not published because of small numbers, confidentiality or other concerns about the quality of the data.

(a) Includes people who reported smoking electronic cigarettes daily, weekly, monthly or less than monthly.

(b) Includes people who reported smoking combustible cigarettes (manufactured and/or roll-your-own) daily, weekly or less than weekly.

(c) Includes those who have never smoked more than 100 combustible cigarettes (manufactured and/or roll-your-own), and those who have

Source: NDSHS 2019

The survey perplexingly defines "current use" as using e-cigarettes "daily, weekly, monthly, or *less than* monthly." [Emphasis added] Functionally, it seems as if any use in the last 12 months counts as current use. But, even with that broad definition, the proportion of non-smoking youth who currently use e-cigarettes has remained strikingly small at 1.3 percent among those aged 14 to 17.

As for the statement about "quadrupling" e-cigarette use among non-smokers, you can see from the numbers that this is false. They could accurately say that *current* use of e-cigarettes among non-smokers increased 75 percent among adolescents and 50 percent among young adults. But it would still be misleading, a prime example of how using relative terms can exaggerate insignificant changes to extremely

small absolute numbers. And that is exactly how unwarranted panics are generated. It's not clear if the author of *The Guardian* article meant to mislead or simply misunderstood the data. But we can certainly expect more of this sort of statistical sleight of hand if and when the debate over whether Australia should continue to deny smokers a life-saving alternative takes center stage.