

# The Public Health Case for E-cigarette Flavors



Lack of combustion is key to the success of e-cigarettes as tobacco harm reduction product. While addictive, nicotine is not responsible for smoking-related diseases, but the process of burning tobacco and inhaling the resulting smoke is.<sup>1</sup>

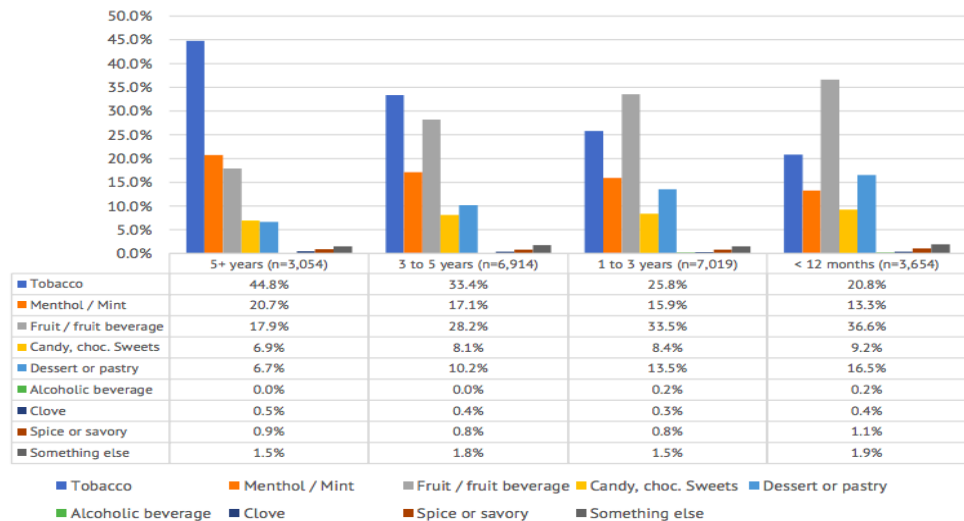
Legal e-cigarettes containing nicotine are known to be 95% safer than combustible cigarettes and are the most popular tool used by Americans to quit smoking.<sup>2</sup> The latest research published in the New England Journal of Medicine (NEJM) shows e-cigarettes are almost twice as effective as nicotine replacement therapies (NRT) at helping smokers quit.<sup>3</sup> The study builds on years of empirical research showing similar results.<sup>4,5,6</sup>

Since e-cigarettes began gaining popularity in the U.S. from 2011, the adult smoking rate has declined at a considerably accelerated pace. After decades of consistent decline, the adult smoking rate leveled off between 2004 and 2010 at 20-21%. Between 2011 and 2017, however, the adult smoking rate fell from 19% to 14%. Youth smoking rates fell even more dramatically from 15.8% in 2011 to 8.1% in 2018.<sup>7</sup>

## How flavors help smokers switch to vaping

Surveys and academic research consistently show, contrary to popular belief, fruit, sweet, and dessert flavored e-cigarettes are the most popular choices among adult vapers. These flavors are now more often than not the first choice for smokers looking to make the switch to vaping. There is also a growing body of research suggesting not only are non-tobacco flavors the most popular options with adult vapers; they assist in smoking cessation.<sup>9</sup>

**FIGURE 1: FLAVOR OF FIRST E-CIGARETTE PURCHASED BY TIME SINCE FIRST E-CIGARETTE PURCHASE: FREQUENT E-CIGARETTE USERS**



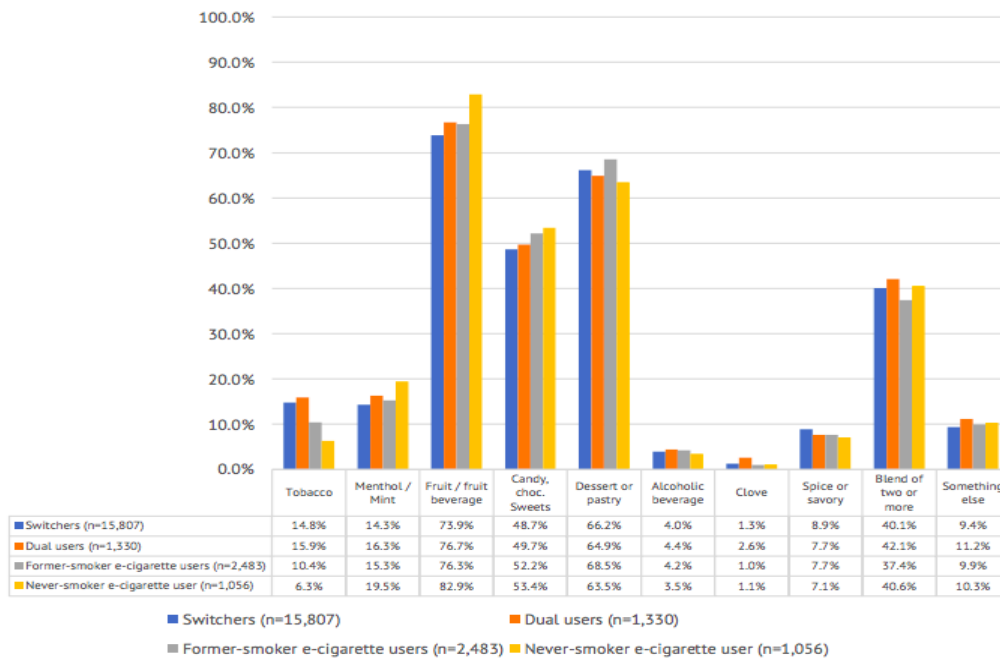
Source: Russell, Christopher, Neil McKeganey, Tiffany Dickson, Mitchell Nides. "Changing patterns of first e-cigarette flavor used and current flavors used by 20,836 adult frequent e-cigarette users in the USA." *Harm Reduction Journal*. April 18, 2018.

A 2017 study by researchers at the Yale School of Public Health published in the National Bureau of Economic Research analyzing the impact of different tobacco flavor bans concluded: "According to our predictions, a ban on flavored e-cigarettes would drive smokers to combustible cigarettes, which have been found to be the more harmful way of getting nicotine." The authors concluded that banning e-cigarette flavors "reduces the appeal of

e-cigarettes to those who are seeking to quit (smoking); e-cigarettes have proven useful as a cessation device for these individuals, and we find that quitters have a preference for flavored e-cigarettes."<sup>10</sup>

This judgment is shared by Michael Siegel, professor of Community Health Sciences at Boston University School of Public Health. “By creating barriers to a much healthier product, these laws will simply force former smokers to return to cigarette smoking,” writes Siegel. “Lawmakers are doing a huge favor not for the public’s health, but for Marlboro, which is going to see a windfall in the ex-smoker market as all of its competition from vaping products and most of its competition from the No. 2 brand (Newport) is eliminated.”<sup>11</sup>

**FIGURE 2: E-CIGARETTE/E-LIQUID FLAVORS CURRENTLY USED BY 20,676 U.S. ADULT FREQUENT E-CIGARETTE USERS, STRATIFIED BY TOBACCO USE PATHWAY(TUP) GROUP**



Source: Russell, Christopher, Neil McKeganey, Tiffany Dickson, Mitchell Nides. “Changing patterns of first e-cigarette flavor used and current flavors used by 20,836 adult frequent e-cigarette users in the USA.” *Harm Reduction Journal*. April 18, 2018.

three quarters of 11-18-year-olds have never tried or are unaware of e-cigarettes.<sup>13</sup> The age of purchase for tobacco products in the U.K. is 18.

Since their entrance into the U.S. market many have feared that e-cigarettes could act as a “gateway” to conventional tobacco smoking. Thankfully, this has proven not to be the case. Despite the worrying rise in youth vaping rates, cigarette smoking among minors has consistently declined every year since e-cigarettes began gaining popularity. The latest data from National Survey on Drug Use and Health shows smoking among 11-17 year-olds declined to its lowest level on record at 2.7 percent in 2018.<sup>14</sup>

## Unintended consequences of Michigan’s emergency rule

The emergency rule cites research claiming e-cigarettes may contain toxic chemicals such as formaldehyde and acrolein. Like most consumer products E-cigarettes and e-liquid vary widely in their contents and construction with many containing few to none of the chemicals cited. What matters is not the presence of a specific chemical but its dosage.<sup>15</sup> Michigan’s emergency rule applies not just to e-cigarettes but to “alternative

nicotine products.” It’s unclear whether alternative nicotine products includes FDA approved nicotine replacement therapies such as flavored nicotine gums.

While it’s true that flavors can play a role in the decision of some youth to vape, the available research suggests it is one of many factors and often not the leading factor.<sup>12</sup> Cigars, pipe tobacco, smokeless tobacco, and nicotine replacement therapies come in a variety of sweet flavors, yet their uptake among youth remains extremely low. In the U.K., where vaping is encouraged as route out of smoking and there are thousands of flavors on the market but youth vaping is a fraction of that seen in the U.S. In 2019, 1.6% of British 11-18-year-olds used e-cigarettes more than once a week and more than

As the rule stands, a person who is in possession of four or more flavored vapor products or flavored nicotine alternatives will be presumed to be possessing these items with the intent to sell. The country's most popular e-cigarette brand Juul sells its pods in packs of four. Many vapers using refillable e-cigarettes carry several different flavors at any one time for personal use. If this language remains in place, many vapers visiting from out of state could fall foul of the law despite having no intention to sell flavored nicotine products.

## Endnotes

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