Driven by a wave of student and parent activism and a focus on health equity, at least 300 local jurisdictions and 5 states have passed laws restricting the sale of flavored nicotine products targeted to middle school and high school students. Focused on redressing race/ethnicity-based health disparities, 2 of those states, California and Massachusetts, have enacted prohibitions on the sale of menthol-flavored cigarettes. Federal law, however, prevents state or local regulation of actual ingredients in tobacco products, rendering these restrictions less than fully effective.

Flavors play an important role in youth initiation of use of nicotine and tobacco products of all kinds. Cities and states that have restricted flavored products have done so chiefly to counter what the US Surgeon General in 2019 termed an "epidemic" of adolescent e-cigarette use. One in 5 high school students have reported using e-cigarettes within the last month, and 2 in 5 of those reported having used them 20 or more days per month. A growing body of evidence suggests that early exposure to nicotine puts these individuals at substantially higher risk of initiating cigarette use.1

In response to mounting public concern, the Trump administration promised to ban all flavored e-cigarette products, but quickly backtracked in the face of industry pressure. The US Food and Drug Administration (FDA) guidance restricted flavors in cartridge-based e-cigarettes but not disposable ones, and it covered mint-flavored e-cigarettes but not menthol-flavored ones. Not surprisingly, use of disposable e-cigarettes and menthol-flavored products subsequently surged.2

Meanwhile, some state and local governments have been striving to address this burgeoning epidemic. States considering strong regulatory stands, such as California and Massachusetts, have found their tools limited. When the 2009 Family Smoking Prevention and Tobacco Control Act became law, it empowered the FDA to regulate tobacco and nicotine products for the first time, but it also preempted state and local governments from various regulatory actions, including blocking any control over tobacco product standards, manufacturing processes, and labeling. The usual argument for preemption is that companies have difficulty complying with different regulations in different localities. However, an industry that promotes nicotine addiction should not be granted such considerations. Doing what works to reduce youth nicotine use is a far more important imperative.

Federal preemption has stifled local regulation in important ways. The law makes it difficult for state and local governments to regulate flavors effectively. Almost all cigarettes and other nicotine products, including so-called tobacco-flavored e-cigarettes, have chocolate, licorice, various sugary sweeteners, or other flavors carefully designed to mask the bitter, peppery taste of nicotine, even if the particular flavor is not individually distinguishable. The addictive nicotine content thus can be increased while the noxious taste and throat hit is minimized. On its website, the leading domestic manufacturer, Philip Morris USA, lists more than 100 flavors and flavor enhancers added to cigarette tobacco, despite the ostensible federal prohibition of flavored cigarette products.

All existing local and state laws dance around the issue of actual ingredient regulation—which is preempted by the Tobacco Control Act—by prohibiting the sale of products with what are known as characterizing flavors. This crude workaround attempts to prevent the sale of a product with a specific distinguishable flavor, such as chocolate, mango, or cherry, but a nuanced combination of flavors is allowed. A regulator must smell or taste the product to try to determine subjectively if the
flavor is characterizing. This absurd scenario simply leads companies to relabel their mixed flavor products with more ambiguous names, such as buzz, jazz, or sweet.3

While flavors are an obvious allure, the use of high-dose nicotine salts by major e-cigarette manufacturers is perhaps even more dangerous. This deft chemical alteration of nicotine makes it more palatable to young users. Because nicotine salts have a lower pH, they are absorbed more slowly from the respiratory tract, allowing youthful users to gradually adapt to nicotine’s effects. Paradoxically, this slower absorption may make older adults who smoke less likely to switch to popular e-cigarettes that use nicotine salts. That may be one reason the onramp to nicotine addiction for adolescents is much more heavily populated than the offramp for adults who smoke.4 Combustible cigarettes transport high doses of nicotine to the brain within seconds, while nicotine salt e-cigarettes deliver a very large dose after minutes.

The Tobacco Control Act also granted a specific and deeply problematic exemption for menthol flavoring in traditional cigarettes. After decades of predatory marketing targeted specifically to racial/ethnic minority communities, Black individuals who smoke use menthol cigarettes at nearly 3 times the rate of White people who smoke. The addition of menthol creates a more powerful addiction and makes it more difficult to quit, thereby substantially increasing the risk of smoking-associated illnesses.5 The power of menthol in prolonging addiction is underscored by the gradual attrition in use of nonmenthol cigarettes, while menthol brands have maintained steady sales.6

Although the FDA has had the authority to prohibit nicotine salts or flavor-related ingredients, including menthol, since 2009, it has persistently failed to act. In response, cities, counties, and states have taken brave and innovative steps to better protect their adolescents, demonstrating that innovations in public health often begin at the local level. Witness the 500-plus localities and 19 states that have independently enacted Tobacco 21 laws long opposed by the industry, eventually forcing Congress to make the age 21 years the new nationwide standard for sales of nicotine and tobacco products.

More than 3.5 million US middle and high school students and a similar number of college-aged young adults are on a path to nicotine addiction because of slickly marketed, highly flavored, nicotine-salt e-cigarettes. Given the propensity for youthful e-cigarette users to move to traditional cigarettes and the deleterious outcomes of nicotine addiction on the adolescent brain, this generational wave of addiction is a public health crisis.7

In the new Biden administration, perhaps the FDA will consider a more muscular response. But even if pointed in the right direction, the wheels of FDA regulation move slowly. For instance, the FDA announced that it would extend its tobacco-associated regulatory authority to e-cigarettes in 2011, but this largely jurisdictional rule took more than 5 years to finalize, while youth e-cigarette use skyrocketed. Similarly, the FDA has repeatedly studied and reported on the deleterious outcomes of menthol, but over 11 years, it has taken no action. Rather than wait for the FDA, US Congress must eliminate federal preemption on regulation of nicotine product ingredients to allow local and state governments all the tools they need to develop their own effective policy responses more rapidly.

ARTICLE INFORMATION
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REFERENCES


