



**Testimony of:
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**Legislative Public Hearing
Joint – Senate Standing Committees on Consumer Protection,
Health, and Education**

Vaping and Electronic Cigarette Safety

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250 Broadway, 19th Floor
New York City**

Good morning, Chairpersons Thomas, Rivera and Mayer and other members of the Senate here today. My name is Brad Hutton and I am the Deputy Commissioner for Public Health for the New York State Department of Health. Thank you for the opportunity to provide information on the Department of Health's (the Department) concerns about electronic cigarettes, vaping, adolescent use thereof, and the steps we are taking in light of the public health crises we now face in the state.

Since 2000, when New York State (NYS) began its comprehensive approach to tobacco control, rates of tobacco use by adults have been in decline. In 2000, about 1 in 4 adults in NYS smoked cigarettes. Now, that rate has been cut in half to just 1 in 8 adults. Fewer than 13 percent of NYS adults smoked cigarettes in 2018, the lowest figure ever recorded, making NYS the state with the 8th lowest adult prevalence in the nation.¹

Even more significant is that, during that same time period, smoking rates among youth declined by over 80 percent. In 2000, the smoking rate among high school youth was 27.4%. In 2018, it was just 4.8%. Preventing youth from initiating a lifetime of addiction means that these youth will likely never use tobacco products, never smoke cigarettes, never become addicted to nicotine, and never struggle with chronic disease associated with tobacco or die prematurely from tobacco-related disease. Preventing youth tobacco use changes the lifetime health trajectory of the young people in our state.

NYS' success at reducing youth smoking rates over the last 20 years is directly related to the State's implementation of comprehensive tobacco control policies that are evidence-based; these effective policies include maintaining the high price of tobacco through taxation,

¹ Centers for Disease Control and Prevention. (2019). https://nccd.cdc.gov/BRFSSPrevalence/rdPage.aspx?rdReport=DPH_BRFSS.ExploreByTopic&irbLocationType=StatesAndMMSA&isClass=CLASS17&isTopic=TOPIC15&isYear=2018&isLocation=

comprehensive clean air restrictions on smoking indoors, along with a significant investment in enforcement activities to prevent underage purchasing. Tobacco control requires effective and targeted media campaigns that increase quit attempts, build support for effective policy, and change social norms about tobacco use. For adults who currently smoke, NYS has increased the delivery of evidence-based tobacco dependence treatments for adult smokers by expanding Medicaid benefits for smoking cessation, providing state of the art smoking cessation services via the NYS Smokers' Quitline. Comprehensive tobacco control combines policy strategies, health systems change, and media interventions supported by robust surveillance and evaluation to measure progress and improve programming.

At least that was the plan, until recently. With the introduction of novel nicotine delivery products, electronic cigarettes, we have a new device that delivers addictive nicotine in relatively high doses, that has been marketed in ways that clearly appeal to youth, and youth have responded by making electronic cigarettes the most popular nicotine device in use today. In a sad irony, the rate of e-cigarette use among NYS high school youth in 2018 was 27%, the same as the cigarette smoking prevalence back in 2000. The 2018 rate of e-cigarette use represents a 160% increase in the rate in just four years. In 2014, only 10.5% of high school youth used e-cigarettes.²

The increase in youth use of e-cigarettes is a nationwide phenomenon and the CDC and FDA have described this enormous increase in nicotine-laced e-cigarette use by youth as an epidemic. This enormous increase in youth use of e-cigarettes did not happen by accident but is

² New York State Department of Health. (2019). Electronic Cigarette Use by Youth Increased 160% between 2014 and 2018. StatShot; Vol. 12, No. 1; https://www.health.ny.gov/prevention/tobacco_control/reports/statshots/volume12/n1_electronic_sig_use_increase.pdf

the result of a host of marketing strategies that are reminiscent of tobacco industry strategies from decades ago. Strategies such as celebrity spokespersons, product placement, and images associated with stereotypical masculine and feminine ideals (e.g., ruggedness and sexuality). Placement of ads uses modern digital techniques including so-called “influencers” on social media that reach youth directly through their smartphones.

But perhaps the most significant marketing strategy when it comes to appealing to adolescents is the creative and almost limitless use of flavored vaping products. Research and surveillance data in NYS and nationally confirm that flavors are a principal reason that youth initiate and maintain e-cigarette use and appealing to youth and young adults with flavored products is key to the industry’s marketing strategy. As of 2014 there were more than 7,700 unique flavors on the market.³ That number has jumped to almost 15,000 flavors on the market today.⁴ The flavors currently available are targeted towards the adolescent consumer, and include fruit flavors (apple, cherry, peach, melon, strawberry), and dessert and candy flavors (cotton candy, gummy bear, root beer float, banana split).⁵ More recently, manufacturers have developed ‘concept flavors’ which may not correspond to any standard or known flavor (e.g., Jazz, First Flight, and Unicorn Milk) and they may use simple color names (such as Blue and Yellow) to substitute for the names of flavors (Vanilla and Banana respectively). Mint and menthol flavors have always been standard flavors in the tobacco industry’s effort to appeal to adolescents. And the list of flavors that appeals to youth continues to grow.

³ Zhu, S-H, et al. (2014). Four Hundred and Sixty Brands of E-cigarettes and Counting: Implications for Product Regulation. *Tobacco Control*, 23(Suppl 3):iii3-iii9.

⁴ Hsu, G., Sun, J.Y., & Zhu, S.H. (2018). *Evolution of electronic cigarette brands from 2013-2014 to 2016-2017: Analysis of brand websites*. *Journal of Medical Internet Research*, 20(3). doi: 10.2196/jmir.8550.

⁵ Campaign for Tobacco Free Kids (2017). *The Flavor Trap: How Companies are Luring Kids with Candy-Flavored E-cigarettes and Cigars*. https://www.tobaccofreekids.org/microsites/flavortrap/full_report.pdf.

Moreover, “[i]n a recent [Department] survey of adolescent e-cigarette users in NYS, 46.3 percent preferred fruit flavors, followed by mint/menthol (19.9%) and chocolate, candy or other sweets (18.2%). In that same survey, 27.3 percent of adolescent e-cigarette users say that flavors are the reason they currently use e-cigarettes, and for 19.3 percent of adolescent e-cigarette users, flavors were the primary reason for first use.”⁶ In a disturbing finding, this study also found that adolescents are more likely to incorrectly believe that certain “fruity” flavors are less dangerous to their health than flavors such as “alcohol, tobacco, and spice flavors.”

The allure of flavored, nicotine-laden vaping e-liquids to NYS’ adolescents is particularly alarming given the especially detrimental effects of nicotine on them. Nicotine has harmful effects on the developing human brain – a process that continues through the mid-twenties. According to the U.S. Surgeon General, these deleterious effects from nicotine can lead to lower impulse control and mood disorders; disrupt attention and learning among youth and young adults; and prime the developing brain for addiction to alcohol and other drugs.⁷

While this epidemic is unfolding, there is a nationwide outbreak of severe respiratory illnesses associated with e-cigarette use and vaping, particularly among adolescents and young adults. This ongoing, multistate outbreak of vaping-related severe respiratory illness is being actively investigated by the NYS Department of Health as well as the FDA and CDC. No single product or chemical substance has been definitively linked to all lung injury cases.⁸ As of October 29, 2019, the CDC reports that there are 1,888 reported cases of e-cigarette or vaping-

⁶ New York State Department of Health. (2017, unpublished). NY Adolescent E-Cigarette Survey Internal Report. Conducted for the New York State Department of Health by RTI International.

⁷ US Department of Health and Human Services. (2016). [E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General](#). Atlanta, GA: U.S.

⁸ Centers for Disease Control and Prevention (2019). Outbreak of Lung Injury Associated with E-Cigarette Use, or Vaping. https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html

associated lung injury (EVALI) cases across 49 states and the U.S. Virgin Islands. There have been 34 confirmed deaths in 15 states.⁹

While initial studies have focused on the vaping of counterfeit THC (the psychoactive ingredient in marijuana) carts (or cartridges), the evidence does not currently point to a single cause or source. Given the uncertainty of the cause of this outbreak and the severe consequences of the illness, the CDC has recommended that the public cease use of *all* e-cigarette and vaping products, not just those containing THC.¹⁰

The link between these two public health emergencies is clear and compelling. Youth and young adults who are vaping nicotine-laced e-liquids at unprecedented rates, are using e-cigarettes or vaping devices to consume other substances. It appears that openness to vaping nicotine has also produced an increase in openness to vaping other substances, most commonly marijuana. Youth are vaping THC that may be sold legally in other states but frequently is purchased “on the streets.” All with unknown and untested ingredients.

In response to these public health crises, NYS has taken a series of bold actions. Beginning with last year’s Executive budget, and prior to the respiratory illness emergency, the Governor proposed numerous policies to begin to bring the epidemic of youth e-cigarette use under control. As a result, beginning December 1, 2019, anyone selling e-liquids must become a registered vapor retailer with the NYS Department of Tax and Finance (DTF). The State will also require that retailers collect a 20% sales tax at the time of sale on the retail price of e-liquids. Youth are particularly price sensitive and tax increases of this magnitude should have an impact on youth prevalence. Additionally, as of November 13th, 2019, the minimum legal sales age of

⁹ https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html

¹⁰ Centers for Disease Control and Prevention (2019). Outbreak of Lung Injury Associated with E-Cigarette Use, or Vaping. https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html

all tobacco products in NYS will be raised to 21. Known as Tobacco 21, or T21, and combined with DTF registration requirements, it allows the State to apply its existing enforcement mechanisms to vaping retailers. Enforcement in NYS has effectively reduced the violation rate of cigarette sales to minors to about 5%, much lower than the federally required 20% threshold. However, while these are necessary steps in reducing youth access to tobacco products, an age restriction alone will not be enough to combat the worsening e-cigarette epidemic among youth.

Throughout 2019, more data became available and it became apparent that youth use of e-cigarettes was essentially out of control. Nearly 40 percent of high school seniors are using e-cigarettes.¹¹ At the same time, the Department became aware of the emergency associated with the vaping-related pulmonary illness that was taking hold across the country and in NYS. As a result, and as a complementary measure to the above actions that relate to aspects of tobacco product sales, the Governor took a series of additional emergency steps to address the vaping emergencies in NYS.

On September 9th, Governor Cuomo announced emergency regulations requiring entities in NYS that sell vaping products to post signage on the dangers of vaping illegal e-cigarette and e-liquid products. Subpoenas were issued for three companies that the Department identified as marketing thickening agents to companies that manufacture vape liquids and that may play a role in vaping-related illnesses.

On September 12th, Governor Cuomo issued an executive order directing State agencies to include e-cigarette prevention within all tobacco prevention and cessation programs and materials, directed the Department of Health and the State Education Department (SED) to

¹¹ NYS Department of Health (2019). https://www.health.ny.gov/prevention/tobacco_control/reports/statshots/volume12/n4_ecig_trends.pdf

develop and deploy e-cigarette prevention measures for schools to include in their curricula, and legislation was signed into law to expand current school-based programs and marketing campaigns on tobacco prevention to include e-cigarettes.

On September 15th, Governor Cuomo proposed a ban on the sale of flavored e-cigarettes in NYS, which the Public Health and Health Planning Council (PHHPC) voted to enact at its September 17, 2019 meeting, directed the State Police and the Department of Health to immediately partner to ramp up enforcement efforts against retailers who sell to minors, and promised to advance legislation to ban deceptive marketing of e-cigarettes to teens and children. While the emergency regulations approved by PHHPC on September 17th excluded tobacco and menthol flavors, the Commissioner provided a report and recommendation to the Governor to add menthol flavor to the list of restricted flavors. Governor Cuomo accepted the State Health Commissioner's recommendation to include menthol and mint flavors to the ban. The State will continue to pursue the addition of menthol and mint flavors to the ban.

At this time, the Department is enjoined from enforcing the emergency regulations restricting sale of flavored e-liquids due to a temporary restraining order, but the State is taking other steps to address this crisis, including making prevention services and treatments for e-cigarette users seeking help to stop vaping more broadly available.

There is no debate that vaping is a harmful epidemic among youth. New York State is taking necessary and effective measures to assist in curbing this continuing and rapidly worsening epidemic as quickly as possible, before more adolescents are harmed and/or addicted, and to address the ongoing, nationwide outbreak of vaping-related severe respiratory illness. The State cannot afford to wait to take action to protect the future health of its youth and adolescents and will continue to explore all options to continue to address this crisis.

Thank you for the opportunity to speak to you today, and I would be glad to answer any questions you may have.