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Let's Clear the Air

REGULATING ELECTRONIC CIGARETTE USE IN NEW YORK CITY

INTRODUCTION

On April 29, 2014, New York City passed Local Law 152, which amended the city's existing anti-smoking legislation to require users of electronic cigarettes (e-cigarettes) to abide by the same restrictions as traditional cigarette smokers.¹ The new legislation prohibits e-cigarette use in parks, restaurants, and other public places.² Supporters of the ban emphasized public health concerns, while proponents of the noncombustible products quickly decried the new law.³ New York City Health Commissioner Thomas Farley hailed the measure as protecting “the progress . . . [the city has] made over the last few years” with regard to traditional smoking.⁴ In stark contrast, e-cigarette advocates argued that “these products . . . actually help[] some people quit or cut back on the much more dangerous alternative of smoking tobacco.”⁵

Despite the controversial nature of New York City's legislation, it appears to have sparked a conversation that may lead to similar measures on a statewide level. As the *New York Post* reported, “[s]tate lawmakers believe that if e-cigarette vapor is bad for New York City, it's also no good for Albany,

¹ Smoke-Free Air Act of 2002, N.Y.C. ADMIN. CODE § 17, ch. 5, *amended by* LOCAL LAWS OF THE CITY OF NEW YORK NO. 152 § 2 (2013).

² Scott Neuman, *New York City Extends Smoking Ban to E-cigarettes*, NPR (Dec. 19, 2013, 7:04 PM), <http://www.npr.org/sections/thetwo-way/2013/12/19/255582225/new-york-extends-smoking-ban-to-e-cigarettes> [<http://perma.cc/7MGR-SSZN>].

³ *Id.*; see also Anemona Hartocollis, *Council Bill Aims to Limit use of E-cigarettes as Their Popularity Grows*, N.Y. TIMES (Nov. 27, 2013), <http://www.nytimes.com/2013/11/28/nyregion/bill-would-restrict-electronic-cigarettes-in-new-york.html> [<http://perma.cc/6SHG-PBSZ>] (contrasting the views of e-cigarette makers, who market their product as a safe alternative to conventional smoking, with those of policymakers, who view the product as a public health threat).

⁴ Neuman, *supra* note 2.

⁵ Tony Newman, *NY Legislation to Ban Flavored E-cigs Will Lead to More Smoking*, HUFFINGTON POST (Dec. 9, 2014, 5:59 AM), http://www.huffingtonpost.com/tony-newman/new-york-flavored-e-cigs-ban_b_5958406.html [<http://perma.cc/6RHT-NF3X>].

Syracuse, Rochester, and Buffalo.”⁶ As the public reacts to the regulation in New York City, the nation will watch and learn whether and how to implement e-cigarette bans elsewhere. This note focuses on New York City’s legislation as a useful study on the effective regulation of e-cigarettes within a context of the devices’ uncertain health implications and the complex social dynamics regarding their use.

Part I of this note is divided into two sections. The first section describes the structure and function of e-cigarettes, examines the current scientific literature concerning these products, and discusses the two conflicting theories of their potential health impact. The second section surveys current federal, state, and local approaches to e-cigarette regulation. Part II proposes that if the courts ultimately find Local Law 152 invalid, the New York City Council should fold e-cigarette products and usage within the current legislative definitions of “tobacco product” and “smoking.” This approach would minimize the harm to New Yorkers from the proliferation of e-cigarettes while also serving as a useful framework for other government bodies seeking to regulate e-cigarette use. The note concludes that these products must be regulated due to their potential to undermine the great progress in reducing conventional cigarette use.

I. THE POLICYMAKER’S DILEMMA: REGULATING E-CIGARETTES WITHIN A SCIENTIFIC VOID

A. *History and Composition of E-cigarettes*

The invention of the e-cigarette is commonly attributed to Hon Lik, a Chinese pharmacist.⁷ Lik’s product made its first appearance in the public market in 2003 and received an international patent in 2007.⁸ As of 2014, the international market boasted 466 brands of e-cigarettes.⁹ In 2013, the global market for e-cigarettes was valued at \$3 billion,¹⁰ with sales

⁶ Pat Bailey, *Albany Moves to Ban E-cigs in Public After City’s Ban*, N.Y. POST (Apr. 29, 2014, 1:41 AM), <http://nypost.com/2014/04/29/albany-moves-to-ban-e-cigs-in-public-after-citys-ban/> [http://perma.cc/GM4Y-CEL5].

⁷ Jordan Paradise, *No Sisyphian Task: How the FDA can Regulate Electronic Cigarettes*, 13 YALE J. HEALTH POL’Y L. & ETHICS 326, 352 (2013).

⁸ Aruni Bhatnagar et al., *Electronic Cigarettes: A Policy Statement from the American Heart Association*, 130 CIRCULATION 1418, 1418 (2014), <http://circ.ahajournals.org/content/130/16/1418.full.pdf+html> [http://perma.cc/4JFJ-7V6X] [hereinafter *American Heart Association*].

⁹ *Id.*

¹⁰ David Jolly & Sabrina Tavernise, *World Health Organization Urges Stronger Regulation of Electronic Cigarettes*, N.Y. TIMES (Aug. 26, 2014), <http://www.nytimes.com/>

projected to grow “by a factor of 17 by the year 2030.”¹¹ Sales of e-cigarettes have increased exponentially since the devices first reached the market.¹² Within the U.S. market, e-cigarette sales are expected to increase by 24.2% per year through 2018.¹³ Using e-cigarettes, or “vaping,” has become increasingly popular. In fact, “vape” was the Oxford Dictionaries Word of the Year in 2014.¹⁴ The spike in e-cigarette use, as well as the products’ potentially harmful health effects and the strides policymakers have made in curbing conventional cigarette use, underscore the need for policymakers to consider how to properly regulate these products.

E-cigarettes are designed to deliver “nicotine and other additives” to the lungs in aerosol form.¹⁵ E-cigarettes contain three basic components: a battery, a nicotine cartridge, and an atomizer.¹⁶ Unlike conventional, combustible cigarettes, e-cigarettes are battery powered.¹⁷ E-cigarette cartridges are filled with a liquid mixture composed of propylene glycol and sometimes glycerol, nicotine and/or other chemicals, and flavoring.¹⁸ The user does not need to light the e-cigarette with a match or lighter.¹⁹ Rather, by simply inhaling, the user triggers “a pressure-sensitive circuit” that heats up an atomizer, which transforms the liquid into an aerosol.²⁰ The user inhales the aerosol through the e-cigarette mouthpiece and exhales the vapor.²¹ Many e-cigarette tips also contain “a light-emitting

2014/08/27/business/international/world-health-organization-urges-stronger-regulation-of-electronic-cigarettes.html?_r=0 [http://perma.cc/4ZCZ-6GDD].

¹¹ WORLD HEALTH ORG., ELECTRONIC NICOTINE DELIVERY SYSTEMS 2 (2014) [hereinafter WHO ENDS].

¹² *American Heart Association*, *supra* note 8, at 1419.

¹³ Phil Wahba, *U.S. E-cigarette Sales Seen Rising 24.2% Per Year Through 2018*, FORTUNE (June 10, 2014, 6:23 PM), <http://fortune.com/2014/06/10/e-cigarette-sales-rising/> [http://perma.cc/7JHH-2YYZ].

¹⁴ *The Oxford Dictionaries Word of the Year is . . . Vape*, OXFORD DICTIONARIES (Nov. 17, 2014), <http://blog.oxforddictionaries.com/2014/11/oxford-dictionaries-word-year-vape/> [http://perma.cc/YK7C-QHQJ]. According to the Oxford Dictionaries blog, “vape” was selected because “[a]s e-cigarettes (or *e-cigs*) have become much more common, so *vape* [] has grown significantly in popularity. You are thirty times more likely to come across the word *vape* than you were two years ago, and usage has more than doubled in the past year.” *Id.* (citation omitted).

¹⁵ Catherine Corey et al., *Electronic Cigarette use Among Middle and High School Students—United States—2011–2012*, 35 MORBIDITY AND MORTALITY WKLY. REP. 729, 729 (2013).

¹⁶ Nick Dantonio, *Vape Away: Why a Minimalist Regulatory Structure is the Best Option for FDA E-cigarette Regulation*, 48 U. RICH. L. REV. 1319, 1328 (2014).

¹⁷ *American Heart Association*, *supra* note 8, at 1419.

¹⁸ *Id.*

¹⁹ Dantonio, *supra* note 16, at 1328.

²⁰ *American Heart Association*, *supra* note 8, at 1419.

²¹ *Id.*

diode” that mimics a smoldering cigarette tip and indicates that the e-cigarette is charged and currently in use.²²

Although all e-cigarettes contain these basic components, they have varying styles and structural designs.²³ For example, the liquid mixture in each product may vary greatly in composition and strength²⁴ and may have fruit or candy flavoring.²⁵

The very design of e-cigarettes indicates that they are supposed to look and function like traditional cigarettes.²⁶ Subsequently, many policymakers worry that e-cigarette use may hinder the effective enforcement of current anti-smoking legislation because those charged with enforcement will not be able to easily distinguish between conventional cigarettes and e-cigarettes.²⁷ Indeed, the inability to differentiate between these products provided a major impetus for the inclusion of e-cigarettes within New York City’s anti-smoking legislation.²⁸

B. *Current Scientific Understanding of the Health Impact of E-cigarettes*

The need to regulate e-cigarettes presents policymakers with a daunting challenge. These noncombustible products do not burn tobacco but instead deliver a vaporized solution that may contain fewer hazardous elements than do conventional cigarettes. Hence, they present a potentially beneficial alternative to cigarettes.²⁹ Federal, state, and local legislatures must struggle to balance the various potential benefits and risks of e-cigarettes within a context of extraordinarily sparse scientific knowledge.³⁰ As of the writing of this note, few researchers have engaged in rigorous, scientific studies on the health impact of e-cigarettes.³¹ The following sections outline the current scientific understanding of e-cigarettes’ effects on human health and compare them to the well-known effects of traditional tobacco cigarettes.

²² *Id.*; *How Blu Works*, BLU ECIGS, <http://www.blucigs.com/how-blu-works/> [<http://perma.cc/PHF9-S2S7>] (last visited Dec. 4, 2015).

²³ *American Heart Association*, *supra* note 8, at 1419.

²⁴ *Paradise*, *supra* note 7, at 353.

²⁵ Daniel F. Hardin, *Blowing Electronic Smoke: Electronic Cigarettes, Regulation, and Protecting the Public Health*, 2011 U. ILL. J.L. TECH. & POLY 433, 438 (2011).

²⁶ *Id.* at 437.

²⁷ *Id.* at 455.

²⁸ *Neuman*, *supra* note 2.

²⁹ *Jolly & Tavernise*, *supra* note 10.

³⁰ *Id.*

³¹ *American Heart Association*, *supra* note 8, at 1424.

1. Nicotine's Health Impact

The World Health Organization Study Group on Tobacco Product Regulation (WHO study) released a report on July 21, 2014, that analyzed recommendations relating to e-cigarettes, which the WHO referred to as electronic nicotine delivery systems (ENDS).³² The WHO study commented that due to product differences such as battery voltage, both the delivery of nicotine and the emission of other toxicants could vary considerably from product to product.³³ Furthermore, the behavior of users themselves may impact nicotine delivery and absorption.³⁴ Despite these differences, however, most e-cigarette products deliver some level of nicotine to the user.³⁵

Several studies have addressed the relationship between nicotine use and health problems. Using nicotine may adversely affect pregnancy and may elevate the risk of cardiovascular disease.³⁶ Moreover, while nicotine itself is not a carcinogenic substance, "it may function as a 'tumour promoter.'"³⁷ Scientists have also noted nicotine involvement in "fundamental aspects of the biology of malignant diseases, as well as of neurodegeneration."³⁸ The American Heart Association (AHA) has identified several health problems that are directly related to nicotine use, such as increased heart rate and blood pressure, insulin resistance, and fetal teratogenicity.³⁹ The WHO study concluded that "[t]he evidence is sufficient to caution children and adolescents, pregnant women, and women of reproductive age about ENDS use because of the potential for fetal and adolescent nicotine exposure to have long-term consequences for brain development."⁴⁰

Apart from the health risks of nicotine inhalation, exposure via ingestion or dermal contact also carries risks.⁴¹ For example, a study by the Centers for Disease Control and Prevention (CDC) indicated a sharp rise in the number of calls reporting incidents involving e-cigarettes to poison control

³² See WHO ENDS, *supra* note 11.

³³ *Id.* at 2.

³⁴ *Id.* (noting factors such as "length of puffs, depth of inhalation and frequency of use" and noting that users may "modify products at home to alter delivery").

³⁵ *American Heart Association, supra* note 8, at 1422.

³⁶ WHO ENDS, *supra* note 11, at 3.

³⁷ *Id.*

³⁸ *Id.*

³⁹ *American Heart Association, supra* note 8, at 1422.

⁴⁰ WHO ENDS, *supra* note 11, at 4.

⁴¹ *Id.*

centers.⁴² Although the proportion of calls involving e-cigarettes (as compared to conventional cigarettes) was only 0.3% in September 2010, by February 2014, the proportion had increased to 41.7%.⁴³ Furthermore, calls involving e-cigarettes were more likely than those involving conventional cigarettes to include reports of adverse health effects subsequent to exposure, with the most common symptoms being “vomiting, nausea, and eye irritation.”⁴⁴ Although the common symptoms of nicotine intoxication include “dizziness, nausea, vomiting, pallor, tachycardia, and sweating,” severe poisonings may result in “[c]onfusion, agitation, lethargy, convulsions, and possibly death.”⁴⁵ The dramatic increase in e-cigarette-related calls to poison control centers indicates nicotine-containing e-cigarettes’ potential to immediately cause adverse symptoms.⁴⁶

Perhaps most importantly, nicotine is an addictive substance.⁴⁷ People become easily addicted to conventional cigarettes because these products deliver nicotine to the lungs in the form of inhaled smoke that reaches the brain in approximately 7 to 10 seconds.⁴⁸ Because e-cigarettes deliver a nicotine vapor, they may be similarly addictive. People who try e-cigarettes may develop nicotine dependency and have difficulty quitting. They may even switch to conventional cigarette use.⁴⁹ Thus, the available scientific literature suggests that e-cigarette use may have a negative impact on the public health. Certainly when e-cigarettes contain nicotine, current scientific knowledge supports regulating these products.

2. The Health Impact of Other Substances in E-cigarettes

Studies have also addressed various potential health risks, such as visual or respiratory irritation, that users may be exposed to as a result of inhaling other toxicants present in e-cigarette aerosol.⁵⁰ Because of the relatively recent arrival of e-cigarettes in the marketplace and the large time span between

⁴² *New CDC Study Finds Dramatic Increase in E-cigarette-Related Calls to Poison Centers*, CTRS. FOR DISEASE CONTROL AND PREVENTION (Apr. 3, 2014, 1:00 PM), <http://www.cdc.gov/media/releases/2014/p0403-e-cigarette-poison.html> [<http://perma.cc/SR5B-45A2>] [hereinafter CDC Press Release].

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *American Heart Association*, *supra* note 8, at 1422.

⁴⁶ CDC Press Release, *supra* note 42.

⁴⁷ *Nicotine Facts*, N.Y. STATE SMOKERS’ QUITLINE, <http://www.nysmokefree.com/Subpage.aspx?P=40&P1=4030> [<http://perma.cc/9TUM-LBWA>] (last visited Dec. 4, 2015).

⁴⁸ *Id.*

⁴⁹ WHO ENDS, *supra* note at 11, at 5-6 (discussing the gateway theory).

⁵⁰ *Id.* at 4.

initial use and the potential development of any serious diseases, conclusive evidence connecting e-cigarette use to particular illnesses will not be available for some time—perhaps decades.⁵¹ Studies assessing the chemical compounds in e-cigarette liquids and vapors have indicated that e-cigarette users are likely exposed to fewer toxicants than are users of combustible cigarettes.⁵² Similarly, a systematic review of 114 studies concluded that overall, e-cigarettes present a much less harmful alternative to conventional smoking and that smokers who switch from tobacco to e-cigarettes would likely experience significant health benefits.⁵³

Although e-cigarettes may emit fewer toxicants than conventional cigarettes, the toxicants in e-cigarette aerosol are still potentially harmful.⁵⁴ Exposure could be especially detrimental in confined spaces, such as restaurants or other indoor locations.⁵⁵ The WHO study concluded that “the existing evidence shows that ENDS aerosol is not merely ‘water vapour’ as is often claimed in the marketing for these products.”⁵⁶ Indeed, a scientific review conducted by the AHA noted “low levels of harmful or potentially harmful metals such as lead, nickel, and chromium,” as well as “the weight-loss chemical rimonabant . . . and the erectile dysfunction medication tadalafil,” in some e-cigarette products.⁵⁷ One study cited by the AHA stated that e-cigarette aerosol exposes nonsmoking bystanders to “nicotine, particulates, and several potentially toxic organic chemicals,” albeit at lower levels than conventional cigarette smoke does.⁵⁸ The study further noted that regular e-cigarette use could potentially “contaminate the environment” with substantial levels of nicotine.⁵⁹ It ultimately concluded that e-cigarettes “are much more likely to provide public health benefits *only in an environment where the appeal, accessibility, promotion, and use of cigarettes and other combusted tobacco products are being rapidly reduced.*”⁶⁰

Therefore, although e-cigarettes are likely less toxic for smokers and bystanders than are conventional cigarettes, the

⁵¹ *Id.*

⁵² *Id.*

⁵³ See Konstantinos E. Farsalinos & Riccardo Polosa, *Safety Evaluation and Risk Assessment of Electronic Cigarettes as Tobacco Cigarette Substitutes: A Systematic Review*, 5 THERAPEUTIC ADVANCES IN DRUG SAFETY 67 (2014).

⁵⁴ WHO ENDS, *supra* note 11, at 5.

⁵⁵ *American Heart Association*, *supra* note 8, at 1425.

⁵⁶ WHO ENDS, *supra* note 11, at 5.

⁵⁷ *American Heart Association*, *supra* note 8, at 1421-22.

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ WHO ENDS, *supra* note 11, at 5 (emphasis added).

precise level of reduced harm is currently unknown.⁶¹ Nicotine and other toxicants found in e-cigarette aerosol may have a substantial negative impact upon the health of both users and bystanders, and the scientific understanding of these products is far from complete. The potential for severely negative health impacts provides strong justifications for the regulation of e-cigarettes.

C. *E-cigarettes: The Lesser of Two Evils?*

Given the limited scientific knowledge of the health effects of e-cigarette use, current policies should not primarily rest on the products' direct health impact.⁶² The more apparent threat derives from the fact that these devices resemble combustible cigarettes much more than nicotine patches and other such products.⁶³ Proponents of e-cigarettes may be correct in arguing that the electronic devices are the "lesser of two evils" insofar as their *direct* health impact is concerned.⁶⁴ But if the products significantly undermine current anti-smoking efforts, they pose an *indirect* threat to smokers' and nonsmokers' health.

The public health debate on e-cigarettes often centers around two theories. First, proponents of e-cigarette use characterize the devices as an effective means for reducing the overall prevalence of tobacco smoking (the harm reduction theory).⁶⁵ Opponents argue that e-cigarette "products . . . could undermine efforts to denormalize tobacco use" (the renormalization theory).⁶⁶ Both theories present rational arguments that policymakers have relied upon in formulating regulations.⁶⁷

Although the harm reduction theory is appealing, it is flawed in its assumption that e-cigarettes are safer than conventional cigarettes; indeed, no solid evidence supports that claim.⁶⁸ Moreover, the evidence concerning the effectiveness of e-cigarettes as a method for quitting conventional smoking is likewise inconclusive.⁶⁹ As of August 2014, relevant evidence was

⁶¹ *Id.*

⁶² Michael Hanlon, *A New Generation of Addicts?*, TELEGRAPH (June 18, 2013, 8:23 AM), <http://www.telegraph.co.uk/science/science-news/10126690/A-new-generation-of-addicts.html> [<http://perma.cc/8KRJ-3MBF>].

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ WHO ENDS, *supra* note 11, at 1, 5-6; *see also* Zachary Cahn & Michael Siegel, *Electronic Cigarettes as a Harm Reduction Strategy for Tobacco Control: A Step Forward or a Repeat of Past Mistakes?*, 32 J. PUB. HEALTH POL'Y 16 (2011) (concluding that e-cigarettes have dramatic harm reduction potential).

⁶⁶ WHO ENDS, *supra* note 11, at 1, 6-7. To date, neither theory has robust empirical support. *Id.* at 7.

⁶⁷ *Id.* at 10-13.

⁶⁸ *Id.* at 5-6.

⁶⁹ *Id.*

limited to “2 randomized controlled trials and 1 large cross-sectional study, anecdotal reports, and Internet-based surveys.”⁷⁰ These studies produced conflicting and inconclusive results.⁷¹

In addition to the lack of evidence that e-cigarettes provide a safe and effective way to quit smoking, proponents of the harm reduction theory fail to account for another risk posed by e-cigarettes—that the products may act as a gateway to other nicotine use. Due to e-cigarettes’ availability, nonsmokers may actually be *more* likely to begin using nicotine than they would be otherwise.⁷² A nonsmoker who starts using e-cigarettes may develop a nicotine addiction that could later result in conventional cigarette use.⁷³ The AHA has further pointed out that e-cigarette use could prompt successful ex-smokers to become re-initiated into the world of smoking.⁷⁴ Therefore, the prevalence of e-cigarettes could severely undermine legislative efforts to reduce conventional cigarette use. Even if e-cigarettes present a lower health risk than conventional cigarettes, e-cigarette use would only have a net beneficial impact upon users and bystanders if conventional cigarette use were contemporaneously reduced.⁷⁵ If e-cigarette use undermines the efficacy of smoke-free air laws and other anti-smoking laws—or serves as a gateway to conventional cigarette use—any potential benefits of vaping would be severely undercut.

The harm reduction theory is further undermined by the renormalization theory, which reflects concerns that the enticing aspects of e-cigarettes, such as their flavoring, may actually “enhance the attractiveness of smoking itself and perpetuate the smoking epidemic.”⁷⁶ Current anti-smoking legislation works, at least in part, by denormalizing smoking behavior.⁷⁷ That is, anti-smoking laws place a stigma upon smokers, thereby reducing the social acceptability of smoking.⁷⁸ The comparative lack of public resistance to anti-smoking measures may indeed be largely

⁷⁰ American Heart Association, *supra* note 8, at 1421.

⁷¹ *Id.*

⁷² WHO ENDS, *supra* note 11, at 6; *see also* Amy L. Fairchild, Ronald Bayer & James Colgrove, *The Renormalization of Smoking? E-cigarettes and the Tobacco “Endgame,”* NEW ENGLAND J. MED. (2014), <http://www.nejm.org/doi/full/10.1056/nejmp1313940> [<http://perma.cc/FVA2-7UL2>] (describing how “twice as many young people experimented with e-cigarettes in 2012 as in 2011, although use of tobacco cigarettes declined in the same period”).

⁷³ WHO ENDS, *supra* note 11, at 6.

⁷⁴ American Heart Association, *supra* note 8, at 1425.

⁷⁵ WHO ENDS, *supra* note 11, at 5.

⁷⁶ *Id.* at 7.

⁷⁷ *Id.* at 8.

⁷⁸ Alice Robb, *Let’s Not Wage War on Smokers*, NEW REPUBLIC (Feb. 10, 2014), <http://www.newrepublic.com/article/116553/smoking-and-stigma-war-smoking-has-gone-too-far> [<http://perma.cc/LK3E-JL2Q>].

attributable to a stigma attached to cigarette use.⁷⁹ Unrestricted e-cigarette use could potentially interfere with quitting incentives and encourage nonsmokers to begin smoking, thereby undermining the stigma created via anti-smoking legislation.⁸⁰ This potential interference becomes more likely in light of the strikingly similar appearance of e-cigarettes and conventional cigarettes. Because it is difficult to tell vapers and smokers apart, the increasing pervasiveness of public vaping may reduce the stigma associated with smoking in general.

Vaping's resemblance to smoking may also undermine efforts to regulate public conventional cigarette use because those charged with enforcing smoke-free policies may have difficulty distinguishing between electric and conventional cigarettes. In support of this theory, the WHO has articulated how e-cigarette use could erode current smoke-free policies.⁸¹ It has reasoned that the resemblance between e-cigarettes and conventional cigarettes, coupled with the fact that "exhaled vapor looks like tobacco smoke," would likely hamper the enforcement of such policies.⁸²

Finally, adolescents may be particularly susceptible to renormalization. The WHO study highlighted the particular vulnerability of adolescents to "visual cues and social norms."⁸³ The CDC indicated that, by 2012, an estimated 1.78 million American middle and high school students had tried e-cigarettes.⁸⁴ Notably, the CDC has also reported that whereas middle school and high school students are smoking fewer conventional cigarettes, e-cigarette use has markedly increased.⁸⁵ This data suggests that children who otherwise may not have smoked are trying nicotine because of e-cigarettes' availability and attractiveness.

Given the horrific impact of conventional cigarettes on human health,⁸⁶ as well as the potential for e-cigarettes to

⁷⁹ *Id.*

⁸⁰ WHO ENDS, *supra* note 11, at 8.

⁸¹ *Id.*

⁸² *Id.* at 9.

⁸³ *Id.* at 8.

⁸⁴ Corey et al., *supra* note 15, at 729.

⁸⁵ *Youth and Tobacco Use*, CTRS. FOR DISEASE CONTROL AND PREVENTION, http://www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/index.htm#estimates [<http://perma.cc/RH54-HAQ7>] (last visited Dec. 4, 2015). For example, between 2011 and 2014, conventional cigarette use among middle schoolers decreased from 4.3% to 2.5%, but e-cigarette use among the same population increased from 0.6% to 3.9%. *Id.*

⁸⁶ U.S. DEPT OF HEALTH AND HUMAN SERVS., *THE HEALTH CONSEQUENCES OF SMOKING—50 YEARS OF PROGRESS* (2014), <http://www.surgeongeneral.gov/library/reports/50-years-of-progress/exec-summary.pdf> [<http://perma.cc/BVJ9-Q2XN>].

undermine the great advances that policy and the law have made toward curbing conventional cigarette use, e-cigarettes ought to be regulated. The recent legislation in New York City marks progress in this arena and provides a model for regulation elsewhere.

D. Regulatory Efforts at the Federal, State, and Local Levels

To craft and implement effective anti-vaping regulations, policymakers must first understand the history of anti-smoking efforts in the United States. In a 2014 report, the Surgeon General found that over 42 million Americans currently smoke cigarettes and that since 1964, over 20 million Americans have suffered premature death as a result of smoking.⁸⁷ The report also noted the tobacco industry's aggressive efforts to fight anti-smoking laws.⁸⁸ Tobacco companies employ "a wide range of tactics to interfere with tobacco control," such as "direct and indirect political lobbying and campaign contributions, financing of research, attempting to affect the course of regulatory and policy machinery and engaging in social responsibility initiatives as part of public relations campaigns."⁸⁹ Policymakers must be knowledgeable in order to halt this epidemic. An examination of past and current federal, state, and local anti-smoking and anti-vaping policies will inform the direction of future policy, both in New York City and the nation at large.

1. Federal Regulatory Efforts

a. Food, Drug, and Cosmetic Act

Under the Food, Drug, and Cosmetic Act (FDCA), the United States Food and Drug Administration (FDA) is authorized "to regulate products as drugs, devices, or drug-device combination products."⁹⁰ Whether the FDA may assert jurisdiction over a product as a drug or device depends on whether "a manufacturer intends for the product to be used to affect [the] structure or function of the human body."⁹¹ In 1996, the FDA attempted to assert jurisdiction over tobacco products and reasoned that nicotine was a drug under the FDCA

⁸⁷ *Id.*

⁸⁸ *Id.* at 4-5.

⁸⁹ WORLD HEALTH ORG., TOBACCO INDUSTRY INTERFERENCE WITH TOBACCO CONTROL (2008), http://apps.who.int/iris/bitstream/10665/83128/1/9789241597340_eng.pdf [<http://perma.cc/H6XQ-SZZL>].

⁹⁰ Hardin, *supra* note 25, at 439.

⁹¹ *Id.*

“because the pharmacological effects of nicotine on the human body were so easily foreseeable that they could be deemed to be intended by the manufacturer.”⁹²

But in *FDA v. Brown & Williamson Tobacco Corp.*, the Supreme Court held that the FDA lacked jurisdiction over tobacco products because an assertion of jurisdiction would have gone against Congress’s clear intent.⁹³ The main purpose of the FDCA “is to ensure that any product regulated by the FDA is ‘safe’ and ‘effective’ for its intended use.”⁹⁴ Through its rulemaking proceedings, the FDA produced evidence clearly indicating that the use of tobacco products is extraordinarily dangerous.⁹⁵ Thus, if the FDA were to regulate tobacco products under the FDCA, the Supreme Court reasoned that, logically, the FDA would be required to remove all tobacco products from the national market.⁹⁶ In reviewing “recent, tobacco-specific legislation,” however, the Court concluded that Congress intended that tobacco *not* be removed from the market.⁹⁷ For example, according to 7 U.S.C. § 1311(a), “[t]he marketing of tobacco constitutes one of the greatest basic industries of the United States with ramifying activities which directly affect interstate and foreign commerce at every point, and stable conditions therein are necessary to the general welfare.”⁹⁸ The Court therefore concluded that tobacco products could not fall within the FDCA’s statutory reach.⁹⁹

b. Family Smoking Prevention and Tobacco Control Act

Spurred by the need to protect public health, Congress passed the Family Smoking Prevention and Tobacco Control Act (TCA) in 2009. The TCA refers to the existing consensus “within the scientific and medical communities that tobacco products are inherently dangerous and cause . . . serious adverse health effects.”¹⁰⁰ Congress found that tobacco use was the primary preventable cause of premature death in the nation.¹⁰¹ It determined that more than 400,000 deaths per

⁹² *Id.* at 440.

⁹³ *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 126 (2000).

⁹⁴ *Id.* at 133.

⁹⁵ *Id.* at 134.

⁹⁶ *Id.* at 135.

⁹⁷ *Id.* at 143.

⁹⁸ 7 U.S.C. § 1311(a) (2012).

⁹⁹ *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 143 (2000).

¹⁰⁰ Family Smoking Prevention and Tobacco Control Act, Pub. L. No. 111-31, § 2, 123 Stat. 1777 (2009).

¹⁰¹ *Id.*

year were attributable to tobacco use,¹⁰² and it linked smoking to chronic illnesses suffered by approximately 8.6 million Americans at the time.¹⁰³

The TCA grants the FDA the power to regulate tobacco products, but the TCA expressly provides that “[t]he term ‘tobacco product’ does not mean an article that is a drug . . . , a device . . . , or a combination product.”¹⁰⁴ Thus, the Act balances the need for regulatory authority over tobacco products with the role of tobacco in the national economy.¹⁰⁵

Importantly, the Surgeon General conclusively established the connection between smoking and lung cancer in 1957,¹⁰⁶ over 50 years prior to passage of the TCA.¹⁰⁷ Despite a growing pile of evidence that smoking had contributed to millions of premature American deaths and that nicotine dependence alters brain chemistry, the FDA refused to assert its jurisdictional authority over tobacco products until 1996.¹⁰⁸ Regulators should draw a lesson from this history. If e-cigarettes have a negative health impact equaling even a quarter of that of conventional cigarettes, state and local governments ought to move swiftly to regulate these products and minimize their adverse effects. Moreover, if e-cigarette use undermines smokers’ ability to quit, encourages nonusers to start using nicotine, or hinders efforts to enforce current anti-smoking legislation, these products will contribute to an already grave national health crisis.

c. *Sottera, Inc. v. FDA*

In 2009, the FDA blocked e-cigarette importation on the grounds “that certain electronic cigarettes . . . were unapproved drug/device combination products.”¹⁰⁹ Such action constituted an attempt by the FDA to reassert its authority in the realm of

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ Family Smoking Prevention and Tobacco Control Act, § 101(a)(2); *see also* Hardin, *supra* note 25, at 443 (stating that “tobacco products shall not be considered a drug, device, or combination product under the FDCA”).

¹⁰⁵ Hardin, *supra* note 25, at 443.

¹⁰⁶ Allen Pusey, *July 12, 1957: Surgeon General Links Smoking and Lung Cancer*, ABA J. (July 1, 2014, 6:30 AM), http://www.abajournal.com/magazine/article/july_12_1957_surgeon_general_links_smoking_and_lung_cancer [<http://perma.cc/JU4W-TWLC>].

¹⁰⁷ Paradise, *supra* note 7, at 336; Family Smoking Prevention and Tobacco Control Act, Pub. L. No. 111-31 (2009).

¹⁰⁸ Paradise, *supra* note 7, at 336-37.

¹⁰⁹ Lawrence R. Deyton & Janet Woodcock, *Stakeholder Letter: Regulation of E-cigarettes and Other Tobacco Products*, U.S. FOOD AND DRUG ADMIN. (Apr. 25, 2011), <http://www.fda.gov/newsevents/publichealthfocus/ucm252360.htm> [<http://perma.cc/N24H-MPCJJ>].

tobacco product regulation under the FDCA.¹¹⁰ In *Sottera, Inc. v. FDA*,¹¹¹ the U.S. Court of Appeals for the D.C. Circuit held that “the FDA has authority to regulate customarily marketed tobacco products—including e-cigarettes—under the Tobacco Act.”¹¹² The government did not appeal the ruling of the D.C. Circuit, and the FDA indicated that it would “comply with the jurisdictional lines established by *Sottera*.”¹¹³ Thus, the *Sottera* ruling emphasized that the FDA has authority under the TCA but not the FDCA to regulate tobacco products.¹¹⁴ Importantly, the ruling also classified e-cigarettes as tobacco products.

The FDA has proposed an extension of its tobacco product regulation that would cover e-cigarettes.¹¹⁵ As of December 6, 2015, however, the proposed rule had not been finalized.¹¹⁶ Thus, e-cigarettes remain largely unregulated at the federal level.¹¹⁷ Given the pressing need for regulation, state and local governments must step up to fill this major regulatory gap.

2. State and Local Regulatory Efforts

The current lack of federal legislation provides states with a valuable opportunity to take initiative in the area of e-cigarette regulation.¹¹⁸ Many policymakers view state and local governments as potential “laborator[ies]” for formulating and experimenting with various policies.¹¹⁹ The TCA itself provides a preservation clause stating that:

[N]othing in this chapter . . . shall be construed to limit the authority of . . . a State . . . to enact, adopt, promulgate, and enforce any law, rule, regulation or other measure with respect to tobacco products that is in addition to, or more stringent than, requirements established under this chapter, including a law, rule, regulation, or other measure relating to

¹¹⁰ Dantonio, *supra* note 16, at 1332.

¹¹¹ *Sottera, Inc. v. FDA*, 627 F.3d 891 (D.C. Cir. 2010).

¹¹² *Id.* at 898; *see also* Deyton & Woodcock, *supra* note 109 (explaining that the TCA provides the FDA with authority to regulate tobacco products).

¹¹³ Hardin, *supra* note 25, at 444; Deyton & Woodcock, *supra* note 109.

¹¹⁴ Dantonio, *supra* note 16, at 1332-33.

¹¹⁵ U.S. Food and Drug Administration, *Deeming—Extending Authorities to Additional Tobacco Products*, <http://www.fda.gov/TobaccoProducts/Labeling/RulesRegulationsGuidance/ucm388395.htm> [http://perma.cc/3EXA-3CCM].

¹¹⁶ *Id.*

¹¹⁷ *Id.*; *see also* Dantonio, *supra* note 16, at 1333 (describing the gaps in federal regulation of e-cigarettes).

¹¹⁸ Michael Freiberg, *Options for State and Local Governments to Regulate Non-Cigarette Tobacco Products*, 21 ANNALS HEALTH L. 407, 409 (2012).

¹¹⁹ *Id.*

or prohibiting the sale, distribution, possession, exposure to, access to, advertising and promotion of, or use of tobacco products.¹²⁰

By preserving states' authority to regulate as they see fit,¹²¹ the TCA accommodates regulations that are more specifically tailored to the geographical and political environments of each state and locality.¹²² State and local regulations enable governments to respond more quickly and directly to their citizens, and such laws may also be less vulnerable to political influences than federal law.¹²³

A key type of nonfederal legislation in this arena is the "public smoking ban."¹²⁴ Many localities already limit the use of tobacco in public places via "smoke-free laws" or "tobacco-free laws."¹²⁵ Such restrictions aim to protect nonconsenting bystanders from exposure to harmful secondhand smoke.¹²⁶ Policymakers who support smoke-free laws argue that because smokers "impose negative externalities" upon the public environment, hindering smokers' ability to smoke in public areas is justified.¹²⁷ The New York legislature, for instance, declared two goals in passing its Smoke-Free Air Act (SFAA): (1) protecting the public health, and (2) balancing the rights of smokers and nonsmokers.¹²⁸

Current FDA proposals regarding e-cigarettes do not address potential use restrictions.¹²⁹ Furthermore, many of the current state and local public smoking bans were not developed with e-cigarettes in mind.¹³⁰ For example, many state and local bans only restrict combustible tobacco use.¹³¹ These laws contain traditional definitions of smoking, which do not neatly encapsulate vaping.¹³² E-cigarettes are not actually burned; thus, vaping does not qualify as "smoking" under the language

¹²⁰ Family Smoking Prevention and Tobacco Control Act, Pub. L. No. 111-31, § 916(a)(1), 123 Stat. 1777, 1823 (2009).

¹²¹ A preemption clause immediately following the preservation clause does set some limitations upon state authority "relating to tobacco product standards, premarket review, adulteration, misbranding, labeling, registration, good manufacturing standards, or modified risk tobacco products." *Id.* § 916(a)(2)(A), 123 Stat. at 1823.

¹²² Paradise, *supra* note 7, at 372-73.

¹²³ Leslie Zellers & Ian McLaughlin, *State and Local Policy as a Tool to Complement and Supplement the FDA Law*, 2 HASTINGS SCI. & TECH. L.J. 117, 118, 119 (2010).

¹²⁴ Hardin, *supra* note 25, at 452.

¹²⁵ Freiberg, *supra* note 118, at 436; Hardin, *supra* note 25, at 450.

¹²⁶ Hardin, *supra* note 25, at 453.

¹²⁷ *Id.* at 455.

¹²⁸ Smoke-Free Air Act of 2002, N.Y.C. ADMIN. CODE § 17-501 (emphasis added).

¹²⁹ Jolly & Tavernise, *supra* note 10.

¹³⁰ Paradise, *supra* note 7, at 373.

¹³¹ Hardin, *supra* note 25, at 453.

¹³² *Id.*

of many bans.¹³³ Governments that have defined “smoking” more vaguely may be able to fold e-cigarettes into their current bans.¹³⁴ On the whole, however, a government wishing to successfully restrict public use of e-cigarettes would likely need to amend its current ban to explicitly include e-cigarettes.¹³⁵

The need for an explicit ban is urgent in light of e-cigarettes’ potential health threat. Some state and local policymakers point to the potential harm that e-cigarette-produced vapors could inflict, especially when such vapors contain nicotine.¹³⁶ Those in favor of a ban also focus on how e-cigarette use could undermine effective enforcement of existing smoke-free laws.¹³⁷ This argument echoes principles of the renormalization theory and emphasizes that the resemblance between electronic and conventional cigarettes could lead to confusion and the belief that, in fact, “no smoke-free law exists.”¹³⁸ Sharing this concern, government officials have observed that the difficulty of distinguishing e-cigarette smokers from smokers of conventional cigarettes could enable many violators to escape punishment.¹³⁹

Hand in hand with the renormalization theory is the belief that smoking e-cigarettes in public may undermine the so-called “social norm’ rationale,” another popular justification for traditional public smoking bans.¹⁴⁰ This rationale argues that smoke-free air laws furnish a “normative community statement that smoking is unacceptable” and that such laws would encourage the criticism and ostracism of smokers in the hopes that negative treatment would persuade smokers to quit smoking.¹⁴¹ Because of the resemblance of e-cigarettes to conventional cigarettes, some policymakers fear that public vaping would facilitate “the re-norming of actual cigarette use.”¹⁴²

Many policymakers have pushed for states to draft laws that explicitly regulate e-cigarettes.¹⁴³ For example, in January 2010, New Jersey became the first state to ban the public use of e-cigarettes¹⁴⁴ when its legislature passed an amendment to its

¹³³ Freiberg, *supra* note 118, at 436.

¹³⁴ Hardin, *supra* note 25, at 453.

¹³⁵ *Id.* at 454.

¹³⁶ Freiberg, *supra* note 118, at 436.

¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ Hardin, *supra* note 25, at 457.

¹⁴⁰ *Id.* at 456.

¹⁴¹ *Id.*

¹⁴² *Id.* at 457.

¹⁴³ Paradise, *supra* note 7, at 373.

¹⁴⁴ GLOB. ADVISORS ON SMOKEFREE POLICY, ELECTRONIC SMOKING DEVICES

1 (2015), http://www.njgasp.org/wp-content/uploads/2014/05/E-Cigs_White_Paper.pdf [<http://perma.cc/MLL3-9YLLK>] [hereinafter GASP].

Smoke-Free Air Act of 2006, which banned the use of e-cigarettes “in all enclosed indoor places of public access and workplaces.”¹⁴⁵ The law went into effect on March 13, 2010.¹⁴⁶ The state Department of Health website posits that “[t]he law is an important part of New Jersey’s effort to eliminate tobacco use as one of our most significant public health threats, reduce smoking-related illnesses and save lives for generations to come.”¹⁴⁷ The amended legislation stated:

Electronic smoking devices have not been approved as to safety and efficacy by the federal Food and Drug Administration, and their use may pose a health risk to persons exposed to their smoke or vapor because of a known irritant contained therein and other substances that may, upon evaluation by that agency, be identified as potentially toxic to those inhaling the smoke or vapor.¹⁴⁸

This legislation concluded that “it is clearly in the public interest to prohibit the smoking of tobacco products and the use of electronic smoking devices in all enclosed indoor places of public access and workplaces.”¹⁴⁹ It provided a separate definition for “electronic smoking device[s].”¹⁵⁰ Furthermore, it defined smoking as “the burning of, inhaling from, exhaling the smoke from, or the possession of a lighted cigar, cigarette, pipe or any other matter or substance which contains tobacco or any other matter that can be smoked, *or the inhaling or exhaling of smoke or vapor from an electronic smoking device.*”¹⁵¹ By placing e-cigarette use within the definition of smoking, the legislation emphasizes the health concerns posed by both conventional and e-cigarette products.

Similarly, an amendment adding e-cigarettes to North Dakota’s public smoking ban went into effect on December 6, 2012.¹⁵² The amended legislation defines “smoking” to mean:

[I]nhaling, exhaling, burning, or carrying any lighted or heated cigar, cigarette, or pipe, or any other lighted or heated tobacco or plant product intended for inhalation, in any manner or in any form. *Smoking also includes the use of an e-cigarette which creates a vapor,*

¹⁴⁵ N.J. STAT. ANN. § 26:3D-56 (West 2010); *see also* *Smoke-Free Air Act Initiative*, STATE OF NEW JERSEY DEPT OF HEALTH, <http://www.nj.gov/health/ctcp/smokefree/> [<http://perma.cc/7Q9A-3FV4>] (last visited Dec. 4, 2015) [hereinafter *NJ SFAA Initiative*] (describing the amendment to New Jersey’s Smoke-Free Air Act).

¹⁴⁶ NJ SFAA Initiative, *supra* note 145.

¹⁴⁷ *Id.*

¹⁴⁸ N.J. STAT. ANN. § 26:3D-56(c).

¹⁴⁹ *Id.* § 26:3D-56(e).

¹⁵⁰ *Id.*

¹⁵¹ *Id.* § 26:3D-57 (emphasis added).

¹⁵² GASP, *supra* note 144, at 2.

*in any manner or any form, or the use of any oral smoking device for the purpose of circumventing the prohibition of smoking in this Act.*¹⁵³

An amendment to Utah's Indoor Clean Air Act that added e-cigarettes to the definition of "tobacco product" became effective on March 12, 2012.¹⁵⁴ That expansive definition avoids the risk that e-cigarettes will escape other tobacco regulations. In addition, the amendment defines "smoking" as:

(a) the possession of any lighted or heated tobacco product in any form; (b) inhaling, exhaling, burning, or heating a substance containing tobacco or nicotine intended for inhalation through a cigar, cigarette, pipe, or hookah; (c) except as provided in Section 26-38-2.6, using an e-cigarette; or (d) using an oral smoking device intended to circumvent the prohibition of smoking in this chapter.¹⁵⁵

These commendable state efforts reflect the recognition that e-cigarettes pose a significant threat to public health. In addition to these state efforts, New York City has also recently passed legislation expanding its public smoking ban to include e-cigarettes, and the new law has drawn intense scrutiny.¹⁵⁶ Given the city's prominence and the likelihood that other states and locales will follow its example,¹⁵⁷ an analysis of its current regulatory framework warrants fuller discussion.

E. New York City Responds: Local Law 152 and Its Opponents

1. Legislative History

New York City's Local Law 152 amended the Smoke-Free Air Act to incorporate e-cigarette regulation.¹⁵⁸ The stated purpose of the amendment is to "prohibit the use of e-cigarette devices in public places and places of employment in order to facilitate enforcement of the SFAA, and protect youth from

¹⁵³ N.D. CENT. CODE § 23-12-09 (2012) (emphasis added).

¹⁵⁴ GASP, *supra* note 144, at 2.

¹⁵⁵ Utah Indoor Clean Air Act, UTAH CODE ANN. § 26-38-2 (West 2015) (emphasis added).

¹⁵⁶ See Jacob Gershman, *Lawsuit Seeks to Vaporize NYC's E-cigarette Ban*, WALL ST. J.L. BLOG (Mar. 25, 2014, 4:13 PM), <http://blogs.wsj.com/law/2014/03/25/lawsuit-seeks-to-vaporize-nycs-e-cigarette-ban/> [<http://perma.cc/8BZR-44CV>].

¹⁵⁷ Agence France Presse, *Los Angeles Bans E-cigarettes in Public Places*, BUS. INSIDER (Mar. 4, 2014, 8:42 PM), <http://www.businessinsider.com/los-angeles-ecig-bans-2014-3> [<http://perma.cc/M4XY-R87K>] (noting that the Los Angeles City Council voted to include e-cigarettes within the city's public smoking ban following "a similar move last December in New York City").

¹⁵⁸ Smoke-Free Air Act of 2002, N.Y.C. ADMIN. CODE § 17-501, *amended by* LOCAL LAWS OF THE CITY OF NEW YORK NO. 152 (2013); COUNCIL OF THE CITY OF NEW YORK FIN. DIV., FISCAL IMPACT STATEMENT PROPOSED INTRO. NO. 1210-A, at 1 (2013) [hereinafter FISCAL IMPACT STATEMENT].

observing behaviors that could encourage them to smoke.”¹⁵⁹ The new law permits e-cigarette use “in all areas where smoking is not regulated” but prohibits e-cigarette use “in all areas where smoking is prohibited” under the SFAA.¹⁶⁰ For example, as amended, section 17-503(a) reads: “Smoking [is], and using electronic cigarettes, are prohibited in all enclosed areas within public places.”¹⁶¹ Similarly, section 17-504 is now entitled: “Regulation of smoking, and use of electronic cigarettes, in places of employment.”¹⁶²

On December 10, 2013, Local Law 152 was introduced to the full New York City Council and was subsequently referred to the Committee on Health.¹⁶³ The Committee on Health held the first hearing on this legislation on December 4, 2013.¹⁶⁴ There, testimony was heard from the NYC health commissioner, public health advocates, representatives from the e-cigarette industry, and members of the general public, among others.¹⁶⁵ The Committee considered an amended version of the bill on December 18, 2013,¹⁶⁶ and passed it at this second hearing by a 9-0 vote.¹⁶⁷ The full City Council voted on the bill on December 19, 2013.¹⁶⁸ The Committee on Health’s report outlined the arguments on both sides:

Manufacturers and proponents of electronic cigarettes claim the devices offer users a safer alternative to smoking cigarettes, as electronic cigarettes can deliver nicotine without combusting tobacco and producing smoke. However, some public health advocates argue that electronic cigarettes may serve as a gateway to smoking and that by offering flavored versions of the product, electronic cigarettes may hold a particular appeal to youth.¹⁶⁹

The Committee also noted its deep concern that neither the safety nor the chemical content of e-cigarettes and e-cigarette vapor had been adequately studied.¹⁷⁰ It noted that the FDA, the CDC, and 40 state attorneys general had “expressed serious concern about electronic cigarettes.”¹⁷¹ It further cited Local Law 94, which in

¹⁵⁹ FISCAL IMPACT STATEMENT, *supra* note 158, at 1.

¹⁶⁰ *Id.*

¹⁶¹ LOCAL LAWS OF THE CITY OF NEW YORK NO. 152 § 3.

¹⁶² *Id.*

¹⁶³ FISCAL IMPACT STATEMENT, *supra* note 158, at 2.

¹⁶⁴ *Id.*

¹⁶⁵ COUNCIL OF THE CITY OF NEW YORK, COMM. ON HEALTH, COMM. REPORT OF THE HUMAN SERVICES DIV. 2 (2013) [hereinafter COMM. HEALTH REPORT].

¹⁶⁶ FISCAL IMPACT STATEMENT, *supra* note 158, at 2.

¹⁶⁷ COMM. HEALTH REPORT, *supra* note 165, at 2.

¹⁶⁸ FISCAL IMPACT STATEMENT, *supra* note 158, at 2.

¹⁶⁹ COMM. HEALTH REPORT, *supra* note 165, at 3 (citation omitted).

¹⁷⁰ *Id.*

¹⁷¹ *Id.*

2013 raised the minimum sales age for e-cigarettes and tobacco products to 21 in New York City and was passed in part to address the worry that young people would begin using e-cigarettes and subsequently suffer from lifelong nicotine addiction.¹⁷²

The Committee Health Report cited a 2009 study by the FDA's Division of Pharmaceutical Analysis that examined the ingredients of two prominent e-cigarette brands.¹⁷³ In most of the samples, the FDA study detected "tobacco-specific impurities suspected of being harmful to humans."¹⁷⁴ The City Council noted the tension resulting from such analyses, stating that "[w]hile some have argued that it is too early to declare that electronic cigarettes are unsafe, others urge precautionary regulation until more is known about the product."¹⁷⁵ The Committee Health Report underscored the FDA's concern about e-cigarette safety, arguing that the dearth of rigorous, systematic studies of e-cigarettes left a vacuum in which "there is no way to know whether the products are safe, what potential harmful chemicals are inhaled during their use, what nicotine levels are present in the product, and if there are any health benefits associated with their use."¹⁷⁶

The Committee Health Report also noted studies highlighting the potential for e-cigarettes to serve as harm-reduction tools.¹⁷⁷ As discussed, proponents of e-cigarettes often argue that vaping may serve as a palliative substitute for conventional cigarette use, rather than as a gateway to conventional cigarette use and/or nicotine addiction.¹⁷⁸ But Local Law 152's legislative findings noted that the FDA had not approved e-cigarette products for smoking cessation purposes.¹⁷⁹ The findings also postulated that use of e-cigarettes may in fact sustain a smoker's nicotine addiction and that experimentation by children and youth may lead these vulnerable populations to become addicted to nicotine and eventually switch to conventional smoking.¹⁸⁰

¹⁷² *Id.*; see also Meera Senthilingam, *E-cigarettes: Helping Smokers Quit, or Fueling a New Addiction?*, CNN (Mar. 23, 2015, 6:37 AM), <http://www.cnn.com/2015/03/23/health/e-cigarettes-smoking-addiction-nicotine/> [<http://perma.cc/4MY9-XBR9>] (noting that "some critics argue these electronic nicotine delivery systems (ENDS) are fueling a new addiction to nicotine—particularly among young people experimenting with them").

¹⁷³ COMM. HEALTH REPORT, *supra* note 165, at 5.

¹⁷⁴ *Id.*

¹⁷⁵ *Id.* at 5-6.

¹⁷⁶ *Id.* at 6.

¹⁷⁷ *Id.*

¹⁷⁸ *Id.*

¹⁷⁹ LOCAL LAWS OF THE CITY OF NEW YORK NO. 152 § 1 (2013).

¹⁸⁰ *Id.*

Moreover, the Committee Health Report emphasized the potential for e-cigarettes to hinder the enforcement of New York City's SFAA and renormalize smoking behavior because of the products' similar appearance to conventional cigarettes.¹⁸¹ Local Law 152 posits that "[t]he use of electronic cigarette devices in places where smoking is prohibited may increase the social acceptability and appeal of smoking, particularly for youth, potentially undermining the enormous progress that has been made over the years in discouraging smoking."¹⁸² Given the above considerations, the City Council determined "that prohibiting the use of electronic cigarette devices in public places and places of employment will protect the health of the citizens of New York City, facilitate enforcement of the [SFAA], and protect youth from observing behaviors that could encourage them to smoke."¹⁸³ Former Mayor Michael Bloomberg signed the bill into law on December 30, 2013,¹⁸⁴ and the legislation went into effect on April 29, 2014.¹⁸⁵

2. The Opposition

On March 25, 2014, the New York City Citizens Lobbying Against Smoker Harassment (NYC C.L.A.S.H.) filed a complaint in New York County Supreme Court asserting that Local Law 152 violates the state constitution.¹⁸⁶ NYC C.L.A.S.H. operates "as a non-profit smokers' rights organization dedicated to advancing and promoting the interests of smokers and protecting the legal rights of smokers since 2002."¹⁸⁷ The group sought a declaratory judgment that Local Law 152 violated the "One Subject Rule" of Article III, § 15 of the New York constitution,¹⁸⁸ which states that "[n]o private or local bill, which may be passed by the legislature, shall embrace more than one subject, and that shall be expressed in the title."¹⁸⁹ NYC C.L.A.S.H. also sought injunctive relief to

¹⁸¹ COMM. HEALTH REPORT, *supra* note 165, at 10.

¹⁸² LOCAL LAWS OF THE CITY OF NEW YORK NO. 152 § 1.

¹⁸³ *Id.*

¹⁸⁴ *Smokers' Rights Group Challenges NYC E-cigarette Ban*, THOMSON REUTERS (Apr. 9, 2014), <http://blog.thomsonreuters.com/index.php/smokers-rights-group-challenges-nyc-e-cigarette-ban/> [<http://perma.cc/6AYT-WXYU>].

¹⁸⁵ FISCAL IMPACT STATEMENT, *supra* note 158, at 1; THOMSON REUTERS, *supra* note 184.

¹⁸⁶ THOMSON REUTERS, *supra* note 184.

¹⁸⁷ Complaint at 3, *NYC C.L.A.S.H., Inc. v. City of New York*, (N.Y. Sup. Mar. 25, 2014) (No. 1527232014), 2014 WL 1293424.

¹⁸⁸ *Id.* at 1.

¹⁸⁹ N.Y. CONST. art. III, § 15.

enjoin and restrain the City of New York and the New York City Council from implementing and enforcing the law.¹⁹⁰

In enacting the SFAA, the City Council expressed dual goals: “(1) to protect the public health and welfare by prohibiting smoking in certain public places except in designated smoking areas and by regulating smoking in the workplace; and (2) to strike a reasonable balance between persons who smoke and the right of nonsmokers to breathe smoke-free air.”¹⁹¹ The Act defines “smoking” as “inhaling, exhaling, burning or carrying any lighted cigar, cigarette, pipe, or any form of lighted object or device which contains tobacco.”¹⁹² It defines “tobacco product” to include “any substance which contains tobacco, including, but not limited to, cigarettes, cigars, pipe tobacco and chewing tobacco.”¹⁹³

NYC C.L.A.S.H. contended that, as a result of Local Law 152, the SFAA now had two subjects: (1) limiting public exposure to harmful second-hand smoke; and (2) regulating e-cigarettes.¹⁹⁴ It concluded that “the title section . . . [was] inaccurate and misleading in that it still unequivocally declare[d] that the subject of the SFAA [wa]s the regulation and prohibition of smoke exposure, and that only tobacco products which generate smoke exposure [we]re subject to the provisions of Chapter 5.”¹⁹⁵ The complaint highlighted the distinct definitions given to smoking and e-cigarette use, as well as the recognition by the Health Committee “that vaping and smoking involve wholly distinct mechanisms and substances.”¹⁹⁶ It concluded that “[i]n adding an E-Cig prohibition to the smoking provisions already in place in Chapter 5, the Council perpetrated the kind of ‘legislative evil’ the One Subject Rule was created to prevent.”¹⁹⁷

Despite NYC C.L.A.S.H.’s arguments, the New York Supreme Court ruled in May 2015 that the amendment was constitutional.¹⁹⁸ In his opinion, Judge Frank Nervo wrote, “Local Law 152 does not become invalid merely because a cigarette is ignited by fire and an e-cigarette is ignited electronically,” and he called the borderline between smoking and vaping a meaningless

¹⁹⁰ Complaint, *supra* note 187, at 2.

¹⁹¹ Smoke-Free Air Act of 2002, N.Y.C. ADMIN. CODE § 17-501.

¹⁹² *Id.* § 17-502(y).

¹⁹³ *Id.* § 17-502(ii).

¹⁹⁴ Complaint, NYC C.L.A.S.H., *supra* note 187, at 15.

¹⁹⁵ *Id.*

¹⁹⁶ *Id.* at 15, 17.

¹⁹⁷ *Id.* at 19.

¹⁹⁸ NYC C.L.A.S.H. v. City of New York, 48 Misc. 3d 661, 662 (N.Y. Sup. Ct. 2015); see also Andrew Denney, *Judge Upholds NYC Ban on Indoor E-cigarette Use*, N.Y. L.J. (May 14, 2015), <http://www.newyorklawjournal.com/id=1202726386800/Judge-Upholds-NYC-Ban-on-Indoor-ECigarette-Use?slreturn=20150711121334> [http://perma.cc/E27U-RR9V] (discussing the Manhattan Supreme Court decision).

distinction.¹⁹⁹ The opinion marks a victory for supporters of the e-cigarette ban and emphasizes the potentially severe effects of vaping on the public health. NYC C.L.A.S.H. has indicated its plan to appeal the decision.²⁰⁰ Given that the law may be struck down on appeal, exploring an alternative approach to regulating e-cigarette use illuminates policy options for New York City.

II. A SUGGESTED APPROACH TO REGULATING E-CIGARETTES IN NEW YORK CITY AND BEYOND

Despite the cloud of unknowns enshrouding e-cigarettes, one fact is clear: e-cigarette use is rapidly increasing.²⁰¹ Perhaps the increased use underscores the opportunity for harm reduction if smokers substitute e-cigarettes for traditional cigarettes.²⁰² Still, the possibility remains that e-cigarette use could renormalize conventional cigarette use, re-initiate conventional cigarette use among ex-smokers, hinder nicotine users' attempts to quit, and initiate nicotine addiction among those who otherwise would not have tried smoking.²⁰³ Although current evidence is inconclusive as to whether e-cigarette vapor harms bystanders, vapers do expose nonsmokers to nicotine and other toxicants.²⁰⁴ Because unregulated e-cigarette use could undermine the progress made by smoke-free laws,²⁰⁵ groups like the AHA recommend including e-cigarettes in state and local smoke-free laws.²⁰⁶

Due to the uncertainty surrounding e-cigarettes and their potential for harm, New York City must continue to regulate these products. The optimal way to do so is under the current version of the NYC Smoke-Free Air Act, including Local Law 152. But if NYC C.L.A.S.H.'s current challenge ultimately succeeds, and the New York Court of Appeals declines to uphold Local Law 152, the following recommendations may help New York City achieve a smoke-free public airspace for its residents. The analysis and framework underpinning these recommendations could also bolster the approaches of other states and localities.

First, the New York City Council should amend the SFAA to include e-cigarettes within its definition of tobacco

¹⁹⁹ NYC C.L.A.S.H., 48 Misc.3d at 664.

²⁰⁰ Julia Marsh, *Smokers-Rights Group Loses Lawsuit Over E-cigarette Ban*, N.Y. POST (May 15, 2015, 11:09 PM), <http://nypost.com/2015/05/15/smokers-rights-group-loses-lawsuit-over-e-cigarette-ban/> [<http://perma.cc/T9U6-PY4Q>].

²⁰¹ *American Heart Association*, *supra* note 8, at 1418, 1425.

²⁰² *Id.* at 1425.

²⁰³ *Id.*

²⁰⁴ *Id.*

²⁰⁵ *Id.*

²⁰⁶ *Id.*

products, as opposed to giving e-cigarettes a separate definition, which risks exempting these products from other tobacco regulations.²⁰⁷ Furthermore, folding e-cigarette products into the definition of tobacco products highlights the policy and health concerns that envelop both. An inclusive definition would emphasize that according to current science, e-cigarettes have potentially deleterious effects on human health. Such a definition would also help to prevent problems like the “One Subject Rule” challenge, because the SFAA would clearly regulate one category of product: tobacco products.

Importantly, including e-cigarettes within the traditional definition of tobacco products would be consistent with the approach taken by the federal system.²⁰⁸ In *Sottera*, the court held that “e-cigarettes fit within the broad definition of *tobacco product* in the Tobacco Control Act (‘any product *made or derived from tobacco* that is intended for human consumption’).”²⁰⁹ The phrase “or derived from tobacco” is important; promoters market e-cigarettes as containing nicotine, an ingredient that greatly contributes to the products’ popularity.²¹⁰ Nicotine itself is “derived from tobacco.”²¹¹ Thus, a literal reading of the TCA allows e-cigarettes to qualify as tobacco products under that statute, although e-cigarettes do not actually contain tobacco.²¹²

The fact that some e-cigarettes do not contain nicotine should not preclude their inclusion within the definition of “tobacco products.” Including all e-cigarettes within the definition, without distinguishing between products that contain nicotine and those that do not, would ease enforcement of the SFAA.²¹³ Proper enforcement of the law would otherwise be practically impossible, because whether a vaper’s e-cigarette contains nicotine is not visually apparent.²¹⁴ Moreover, the public use of nicotine-free e-cigarettes would undermine the social norm rationale behind smoke-free laws.²¹⁵ Thus, the distinction would eliminate two major benefits of including e-cigarettes within the SFAA: facilitating proper enforcement of the law and preventing renormalization of smoking behavior.

²⁰⁷ *Id.* at 1428.

²⁰⁸ *Id.*

²⁰⁹ *Id.* (emphasis added) (citation omitted); *Sottera, Inc. v. FDA*, 627 F.3d 891 (D.C. Cir. 2010).

²¹⁰ *Paradise, supra* note 7, at 346.

²¹¹ *Id.*

²¹² *Id.*

²¹³ *Id.*

²¹⁴ *Id.*

²¹⁵ *American Heart Association, supra* note 8, at 1425; *see supra* note 19 and accompanying text.

As it currently stands, the SFAA has separate definitions for tobacco products and e-cigarettes. Under the SFAA, an e-cigarette is “an electronic device that delivers vapor for inhalation.”²¹⁶ Furthermore, the SFAA treats tobacco products and e-cigarettes as distinct products. For example, § 17-505(h) describes areas “where the public is invited for the primary purpose of promoting and sampling tobacco products *or electronic cigarettes*.”²¹⁷ The New York City Council should revise its definition of “tobacco product” to include e-cigarettes, regardless of whether or not they contain nicotine, and to more closely mirror the AHA’s definition.²¹⁸

Similarly, the City Council should amend the SFAA’s definition of “smoking” to include e-cigarette use. One of the focal points of NYC C.L.A.S.H.’s argument against the amendment is that the SFAA assigns distinct definitions to smoking and vaping.²¹⁹ To illustrate, § 17-503(a) states that “[s]moking [is], *and using electronic cigarettes, are prohibited in all enclosed areas within public places.*”²²⁰ The legislature could borrow the language used in the New Jersey Smoke-Free Air Act to amend New York City’s SFAA, which defines smoking as the act of “inhaling, exhaling, burning or carrying any lighted cigar, cigarette, pipe, or any form of lighted object or device which contains tobacco.”²²¹ The legislature ought to expand upon this

²¹⁶ LOCAL LAWS OF THE CITY OF NEW YORK NO. 152 § 2 (2013); Smoke-Free Air Act of 2002, N.Y.C. ADMIN. CODE § 17-502(qq).

²¹⁷ LOCAL LAWS OF THE CITY OF NEW YORK NO. 152 § 5; Smoke-Free Air Act, N.Y.C. ADMIN. CODE § 17-505(h) (2014).

²¹⁸ The AHA defines “tobacco product” as:

(a) Any product containing, made, *or derived from tobacco or containing nicotine*, whether synthetically produced or derived from other sources that is intended for human consumption (and not marketed for cessation), whether smoked, *heated*, chewed, absorbed, dissolved, *inhaled*, snorted, sniffed, or ingested by any other means, including *but not limited to* cigarettes, cigars, little cigars, . . . ; and

(b) *Any electronic device that delivers nicotine or other substances to the person inhaling from the device, including but not limited to an electronic cigarette (e-cigarette), cigar, pipe, or hookah.*

(c) Notwithstanding any provision of subsections (a) and (b) to the contrary, “tobacco product” includes any component, part, or accessory of a tobacco product, whether or not sold separately. “Tobacco product” does not include any product that has been approved by the US Food and Drug Administration for sale as a tobacco cessation product or for other therapeutic purposes where such product is marketed and sold solely for such an approved purpose.

American Heart Association, supra note 8, at 1431 (emphasis added).

²¹⁹ Complaint, NYC C.L.A.S.H., Inc., *supra* note 187, at 15, 17.

²²⁰ LOCAL LAWS OF THE CITY OF NEW YORK NO. 152 § 3; Smoke-Free Air Act of 2002, N.Y.C. ADMIN. CODE § 17-503(a).

²²¹ Smoke-Free Air Act of 2002, N.Y.C. ADMIN. CODE § 17-501.

definition to include the phrase: “*or the inhaling or exhaling of smoke or vapor from an electronic cigarette product.*”²²² Although the difference between the current and proposed definitions is subtle, the distinction is important. The current legislation separates the act of smoking from the act of using an e-cigarette. In contrast, the proposed legislation includes e-cigarette usage within the definition of smoking. Importantly, the proposed definition would include e-cigarettes regardless of nicotine content. Moreover, the title of the SFAA would not be “inaccurate and misleading” as alleged by NYC C.L.A.S.H., because e-cigarettes would be “*tobacco products which generate smoke exposure.*”²²³

Of course, e-cigarette vapor may not fall within conventional conceptions of “smoke.” In fact, one of *Merriam-Webster’s* primary definitions of the word “smoke” is “the act of smoking a cigarette, cigar, etc.”²²⁴ But *Merriam-Webster’s* also defines “smoke” as a “fume or vapor often resulting from the action of heat on moisture,”²²⁵ a definition that easily encompasses e-cigarette-produced vapors. Indeed, Global Advisors on Smokefree Policy (GASP) reasoned that because e-cigarettes are “smoked,” their use is prohibited under the New Jersey Smoke-Free Air Act even without its current amendments.²²⁶ (The 2006 New Jersey Smoke-Free Air Act prohibited the public use of “*any other matter that can be smoked.*”²²⁷) GASP argued that when an e-cigarette heats and vaporizes its liquid solution, it creates “smoke,” which is then inhaled and exhaled via the act of “smoking.”²²⁸

E-cigarettes are not traditional products, and so it is not surprising that they fail to fall neatly into a categorical bucket. Given their recent arrival in the global marketplace, labeling e-cigarettes as “tobacco products” that are “smoked” may seem like a stretch. But e-cigarettes are altering the landscape of “smoking,” and traditional notions of what constitutes smoking behavior will likely change as these devices become more popular and better understood.

CONCLUSION

If the courts ultimately find Local Law 152 unconstitutional, New York City must draft legislation regulating

²²² N.J. STAT. ANN. § 26:3D-56(c) (West 2010) (emphasis added).

²²³ Complaint, NYC C.L.A.S.H., Inc., *supra* note 187, at 15 (emphasis added).

²²⁴ *Smoke*, MERRIAM-WEBSTER’S COLLEGIATE DICTIONARY (11th ed. 2012).

²²⁵ *Id.*

²²⁶ GASP, *supra* note 144, at 15.

²²⁷ *Id.* (citing N.J. STAT. ANN. § 26:3D-57).

²²⁸ *Id.*

e-cigarettes that will pass constitutional muster. An effective means of ensuring that future New Yorkers can breathe easy would be to include e-cigarettes in the statutory definitions of “tobacco product” and “smoking.”

This solution would provide clarity for those seeking to implement anti-smoking legislation, mirror the federal approach, and emphasize the risks of e-cigarette use, which undermine the progress made toward clearing New York City’s air. Given the products’ potential to undermine smoke-free air laws, as well as their potential to physically harm both users and bystanders, e-cigarettes must be effectively regulated in New York City and elsewhere.

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