

Incorporating E-cigarettes into Existing or Proposed Tobacco Controls

The Public Health and Tobacco Policy Center has developed an example policy regulating indoor and outdoor e-cigarette use. This model illustrates just one way e-cigarettes may be incorporated into existing and proposed tobacco control policies. For instance, the model may be adapted to a multi-unit housing use policy, and a policy restricting sales, whether through tobacco retailer licensing or other means of restricting the number, type, location of retailers, the product they sell (e.g., flavored tobacco), or the consumer to whom they sell (e.g. under age 21). Our model is mindful of the considerations presented in our technical report, [Local Regulation of E-cigarettes](#) and consistent with our overall policy recommendations to:

- Incorporate e-cigarettes into new or existing restrictions on **tobacco product use** (e.g., tobacco free outdoor and indoor policies; private and public policies);
- Incorporate e-cigarettes into new or existing restrictions on **sales of tobacco products** (e.g., tobacco retailer licensing requirements; restrictions on number, type, location of tobacco sales; restrictions on retail redemption of tobacco product price promotions);
- Separately define “Tobacco Product” and e-cigarette; refer to the product as “e-cigarette” for general purposes and “Electronic Aerosol Delivery System” for more precise regulatory purposes;
 - Use the term “e-cigarette” in a policy’s Title and Findings (Section I of our model); clearly define and rename the term in the Definition section, and thereafter in the policy, refer to the product by its defined name, “Electronic Aerosol Delivery System;”
- Define “Tobacco Product” and “Electronic Aerosol Delivery System” in a manner appropriate for both **sales regulations** (such as tobacco retail licensing, and regulation of the number, location or type of outlets permitted to sell tobacco products), and **use regulations** (such as clean indoor air or tobacco-free housing policies) so they may be easily incorporated into an existing or proposed policy;
 - Define “Tobacco Product” to include all products derived from tobacco (whether or not they contain tobacco leaf), as well as those containing nicotine (whether natural or synthetic);
 - **Tobacco Product** means any product made or derived from tobacco or which contains nicotine marketed or sold for human consumption, whether consumption occurs through inhalation, or oral or dermal absorption. Tobacco product does not include drugs, devices, or combination products authorized for sale by the state or U.S. Food and

Drug Administration, as those terms are defined in the Federal Food, Drug and Cosmetic Act;

- Define “Electronic Aerosol Delivery System” to include both nicotine-containing and nicotine free products;
 - **Electronic Aerosol Delivery System** means an electronic device that, when activated, produces an aerosol that may be inhaled. Electronic Aerosol Delivery System includes any component or part but not accessory, and any liquid or other substance to be aerosolized, whether or not separately sold. Electronic Aerosol Delivery System does not include drugs, devices, or combination products authorized for sale by the state or U.S. Food and Drug Administration, as those terms are defined in the Federal Food, Drug and Cosmetic Acts.

Use of these terms should require minimal language changes to an existing local law. Anticipated amendments are illustrated in our model use ordinance through underlining added language and [bracketing] deleted language. **Bolded** language indicates decision points for local governments.

New York Model Ordinance to Prohibit Tobacco and E-cigarette Use in Specified Indoor and Outdoor Areas

Section 1: Findings

The **Common Council of City** hereby finds and declares as follows:

Tobacco use causes death and disease and continues to be an urgent public health challenge:

- Tobacco-related illness is the leading cause of preventable death in the United States,¹ accounting for about 480,000 deaths each year;²
- Smoking kills 28,200 New York adults each year;³
- Each day in the United States, more than 3,200 youth smoke their first cigarette, and another 2,100 youth and young adults become daily smokers;⁴
- Annually in New York, 10,600 youth become new daily smokers⁵ and an estimated 280,000 New York youth now alive will die early from smoking;⁶
- Tobacco use can cause chronic lung disease, diabetes, eye disease, rheumatoid arthritis, coronary heart disease, stroke, ectopic pregnancy, and infertility, in addition to leukemia and cancer of the lungs, larynx, colon, liver, esophagus, pancreas, kidney, cervix, bladder, stomach and mouth;⁷
- More than half a million New Yorkers live with serious smoking-caused illness and disability;⁸
- Tobacco-related health care annually costs New Yorkers \$10.4 billion, including \$3.3 billion in Medicaid expenses;⁹ and
- Annual smoking-attributable economic costs in the United States for the years 2009-2012 were between \$289-332.5 billion.¹⁰

E-cigarettes and similar devices may contribute to youth smoking and reduced cessation:

- E-cigarettes are designed to deliver nicotine, a highly addictive drug;¹¹
- Nicotine-containing e-cigarettes are the most common nicotine products used by students with 3 million middle and high school students using them in 2015;¹²
- Youth use of e-cigarettes and similar products is associated with future cigarette use;¹³
- Adults who might otherwise quit use e-cigarettes in addition to cigarettes¹⁴ thereby potentially increasing nicotine intake and addiction level;
- E-cigarettes are often marketed for use when traditional smoking is prohibited, thereby maintaining addiction;¹⁵
- E-cigarettes are not a proven cessation device, nor has the U.S. Food and Drug Administration (FDA) approved them as such;
- In fact, the FDA has recently extended its regulatory authority over e-cigarettes, in part because of the health risks of adolescent nicotine exposure and the agency's concern that youth are initiating tobacco use with e-cigarettes.¹⁶

E-cigarettes and similar devices pose health hazards and may contribute to youth smoking and reduced cessation, regardless of nicotine content.

- E-cigarettes and similar devices contain or produce chemicals other than nicotine known to be toxic, carcinogenic and causative of respiratory and heart distress.¹⁷



- E-cigarette manufacturers are aggressively and successfully marketing to youth, using the same tactics now unavailable to cigarette and other tobacco manufacturers precisely because they were found to recruit youth.¹⁸
- E-cigarettes and similar devices look identical whether they contain nicotine or not; as a result, their use not only normalizes e-cigarette use, but also renormalizes tobacco addiction and use of tobacco products, like combustible cigarettes.
- Normalization undermines tobacco control efforts and may contribute to smoking initiation and reduced cessation.
- Some e-cigarettes labeled as “nicotine free” contain nicotine,¹⁹ and thus may more directly contribute to addiction.

E-cigarette use in public indoor and outdoor spaces undermines tobacco control progress, and threatens public health:

- E-cigarette emissions may contain particulate matter, harmful to those exposed²⁰ and bystanders involuntarily exposed may be harmed;²¹
- The FDA has presented evidence of nicotine and other toxicants in exhaled e-cigarette aerosol and stated exposure should be limited;²²
- Use of use of nicotine-containing or nicotine-free e-cigarettes may harm public health by creating visual cues and renormalizing nicotine or tobacco addiction and confusing youth and enforcement agents;
- The FDA has expressed concern that use of e-cigarettes will provide visual cues to youth and will renormalize cigarette smoking and addiction; recognizing this potential impact on public health, the agency recently extended its authority to regulate e-cigarettes as tobacco products.²³

Smokeless tobacco is not a safe alternative to smoking and also causes death and disease:

- Smokeless tobacco products are known to cause lung, larynx, esophageal, and oral and pancreatic cancers;²⁴
- Smokeless tobacco spit is contains carcinogenic chemicals,²⁵ creates unwanted waste which are often improperly disposed.
- A dip of smokeless tobacco typically contains 3-5 times more nicotine than a cigarette.²⁶ Research shows that smokers have difficulty switching from cigarettes to smokeless tobacco. Instead, many become dual users of both cigarettes and smokeless products²⁷ – increasing the addiction.
- The regular use of snuff doubles the user’s risk of cardiovascular disease and death;²⁸
- Adolescent smokeless tobacco users are more likely than nonusers to become adult cigarette smokers.²⁹

Secondhand smoke has been repeatedly identified as a health hazard:

- The U.S. Surgeon General concluded that there is no risk-free level of exposure to secondhand smoke;³⁰
- Secondhand smoke exposure causes as many as 300,000 children in the United States to suffer from lower respiratory tract infections, such as pneumonia and bronchitis, exacerbates childhood asthma, and increases the risk of acute, chronic, middle ear infection in children;³¹

- The Surgeon General concludes that even brief exposures to secondhand smoke may increase the severity of asthma and lower respiratory infections, especially in children, and have adverse effects on the heart.³²
- Secondhand smoke exposure can cause cancer, respiratory, and cardiovascular disease.³³
- Secondhand smoke is responsible for approximately 3,000 deaths among nonsmokers each year in New York;³⁴
- One in four nonsmokers (including nearly half of Black nonsmokers) in the United States are still exposed to secondhand smoke;³⁵
- Two in every five children (including 7 of every 10 Black children) are exposed to secondhand smoke;³⁶
- More than two in five nonsmokers living in poverty are exposed to secondhand smoke;³⁷
- Secondhand smoke is responsible for approximately 42,000 deaths among nonsmokers each year in the United States;³⁸ and
- Secondhand smoke exposure annually costs \$5.6 billion in lost productivity in the United States.³⁹

Exposure to secondhand smoke anywhere has negative health impacts, and exposure to secondhand smoke occurs at significant levels outdoors:

- Irritation from secondhand smoke begins at levels as low as 4 micrograms per cubic meter, and in some outdoor situations this level can be found as far away as 13 feet from a burning cigarette⁴⁰
- To be completely free from exposure to secondhand smoke in outdoor places, a person may have to move nearly 25 feet away from the source of the smoke, about the width of a two lane road;⁴¹ and
- At typical outdoor locations, persons may be exposed to tobacco smoke levels as high as indoor secondhand smoke concentrations.⁴²

Cigarette butts are a major and persistent source of litter:

- Over two billion cigarette butts are discarded every day worldwide, and Americans alone discard more than 175 million pounds of cigarette butts every year;
- Cigarette filters have been found in the stomachs of fish, birds, and other animals that mistake them for food, thus swallowing harmful plastic and toxic chemicals;⁴³ and Americans alone discard more than 175 million pounds of cigarette butts every year.⁴⁴
- Cigarette filters and plastic wraps from cigarette packages are not biodegradable and tobacco-related waste discarded in parks, along sidewalks, and in street gutters makes its way through storm drains into creeks and rivers, leaking dangerous chemicals into our watershed.

Cigarette butts and liquid nicotine pose a health threat to young children:

- In 2013, American poison control centers received over 8,500 reports of children under age 13 poisoned by cigarettes, cigarette butts, and other tobacco products;⁴⁵ and
- Children poisoned by cigarette butts or liquid nicotine used with e-cigarette can experience vomiting, nausea, lethargy, eye irritation and gagging;⁴⁶

- Calls to American poison control centers concerning liquid nicotine exposures increased from one in February 2010 to 215 in February 2014, most of which involved children under age five years;⁴⁷

Children are currently unprotected from tobacco smoke in outdoor areas where they are likely to be present, such as our **City's** playgrounds;

While devices like e-cigarettes may be used with nicotine-free liquids, the and the liquids remain unregulated and potentially pose confusion for enforcement officers and the public and their use must be similarly restricted;

Creating smoke- and aerosol-free zones in certain public spaces where children and adults are likely to congregate and/or where persons cannot readily escape from exposure to tobacco smoke will protect the health, safety and welfare of the residents of our community;

Local regulation of tobacco use is important because while the federal government may regulate tobacco products, it is not authorized to impose local smoking restrictions;

NOW THEREFORE, it is the intent of **Common Council**, in enacting this ordinance, to provide for the public health, safety, and welfare by protecting the public and the environment from tobacco-related litter; by discouraging the inherently dangerous behavior of smoking around non-tobacco users, especially children; by reducing involuntary exposure to secondhand smoke and aerosol where people play, exercise, and relax; by reducing the potential for children to wrongly associate tobacco use with a healthy lifestyle, and by affirming and promoting a health environment in and around the City's recreational areas.

Section 2: Definitions

As used in this Chapter, the following terms shall have the meanings indicated:

ACCESSORY means any product that is intended or reasonably expected to be used with or for the human consumption of a tobacco product; does not contain tobacco and is not made or derived from tobacco; and meets either of the following: (1) is not intended or reasonably expected to affect or alter the performance, composition, constituents, or characteristics of a tobacco product; or (2) is intended or reasonably expected to affect or maintain the performance, composition, constituents, or characteristics of a tobacco product but (a) solely controls moisture and/or temperature of a stored tobacco product; or (b) solely provides an external heat source to initiate but not maintain combustion of a tobacco product. Accessory includes, but is not limited to, carrying cases, lanyards and holsters.

BEACH means any outdoor area along a shoreline of an ocean or lake and extending **one thousand (1,000) feet** from the shoreline that is owned or operated by the **City** or that is open to the general public, regardless of any fee or age requirement.

COMPONENT OR PART means any software or assembly of materials intended or reasonably expected: (1) to alter or affect the tobacco product's performance, composition, constituents, or characteristics; or (2) to be used with or for the human consumption of a tobacco product. Component or part excludes anything that is an accessory of a tobacco product, and includes, but is not limited to e-liquids, cartridges, certain batteries, heating coils, programmable software and flavorings for Electronic Aerosol Delivery Systems.

ELECTRONIC AEROSOL DELIVERY SYSTEM means an electronic device that, when activated, produces an aerosol that may be inhaled. Electronic Aerosol Delivery System includes any component, part but not accessory, and any liquid or other substance to be aerosolized, whether or not separately sold. Electronic Aerosol Delivery System does not include drugs, devices, or combination products authorized for sale by the state or U.S. Food and Drug Administration, as those terms are defined in the Federal Food, Drug and Cosmetic Act.

ENTRANCES AND EXITS means the passageways by which persons may enter a building, typically consisting of a door or doorway. For the purposes of this chapter, this includes the stoop, steps, or ramp leading from the sidewalk or pavement to such a door or doorway.

FOOD SERVICE ESTABLISHMENT means any business establishment, including outdoor seating areas thereof, in which the business includes the sale of food or beverages for on-premises consumption.

PERSON means any natural person, partnership, cooperative association, corporation, personal representative, receiver, trustee, assignee, or any other legal entity except the **City**.

PLACE OF EMPLOYMENT means any indoor area or portion thereof under the control of an employer in which employees of the employer perform services, and shall include, but not be limited to, offices, school grounds, retail stores, banquet facilities, theaters, food stores, banks, financial institutions, factories, warehouses, employee cafeterias, lounges, auditoriums, gymnasiums, restrooms, elevators, hallways, museums, libraries, bowling establishments, employee medical facilities, rooms or areas containing photocopying equipment or other office equipment used in common, and company vehicles.

PLAYING FIELD means that portion of an outdoor Recreational Area that is set up and marked in some way for the playing of one or more specific games or sports (such as baseball, football, or soccer), and that is open to the general public. For the purposes of this chapter, a playing field that is fenced or the outside perimeter of which is otherwise physically demarcated shall be deemed to include all of the area inside such fence or demarcation, together with any bleachers or other designated viewing area; a playing field that is not fenced or otherwise demarcated (as to its outside perimeter) shall be deemed to include all of the area customarily required for playing the game for which it is being used, together with any bleachers or other designated viewing area.

RECREATIONAL AREA means any outdoor area that is **owned or operated by the City and** open to the general public for recreational purposes, regardless of any fee or age requirement. The term “Recreational Area” includes but is not limited to Playing Fields, playgrounds, parks, picnic areas, golf courses, walking paths, gardens, hiking trails, bike paths, horseback riding trails, swimming pools, roller- and ice-skating rinks, skateboard parks, and amusement parks. The term “Recreational Area” is not intended to include streets and sidewalks unless they are located within a demarcated Recreational Area such as a park.

SERVICE AREA means any area designed to be or regularly used by one or more persons to receive or wait to receive a service, enter a public place, or make a transaction, whether or not such service includes the exchange of money. Service Areas include, but are not limited to, bus stops and other mass transit shelters, ATMs, public telephones, ticket lines, bus stops, cab stands, concert lines, sporting event lines, and food vendor lines.

SMOKING means inhaling, 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.

TOBACCO PRODUCT means any product made or derived from tobacco or which contains nicotine marketed or sold for human consumption, whether consumption occurs through inhalation, or oral or dermal absorption. Tobacco product does not include drugs, devices, or combination products authorized for sale by the state or U.S. Food and Drug Administration, as those terms are defined in the Federal Food, Drug and Cosmetic Act.

Section 3: Prohibition of Tobacco Product Use in Indoor and Outdoor Areas

(A) Smoking and the use of Tobacco Products and Electronic Aerosol Delivery Systems is prohibited in all of the following places within the **City**:

- (1) Places of Employment;
- (2) Bars;
- (3) Enclosed indoor areas open to the public;
- (4) Beaches;
- (5) Recreational Areas;
- (6) Food Service Establishments; and
- (7) All outdoor areas of property owned or leased by the **City** for official government use.
- (8) Within 100 feet of entrances, exits or outdoor areas of any public or private elementary or secondary school; provided, however, that the provisions of this subsection shall not apply to smoking or Electronic Aerosol Delivery System use

in a residence, or within the real property boundary lines of such residential real property;

- (9) Within 25 feet of Entrances and Exits to other buildings within which smoking is prohibited by Article 13-E of the New York Public Health Law;
- (10) Within 25 feet of Food Service Establishments, including the outdoor areas thereof; and
- (11) Outdoor Service Areas and within 25 feet thereof.

(B) The prohibitions in Section 3(A) shall not apply to outdoor areas of private residential properties.

(C) Nothing in this Chapter prohibits any Person with legal control over any property from prohibiting Smoking and Tobacco Product or Electronic Aerosol Delivery System use on any part of such property, even if Smoking or the use of Tobacco Products or Electronic Aerosol Delivery Systems is not otherwise prohibited in that area.

(D) The Director of _____ or his/her designee shall engage in an ongoing educational program to explain and clarify the purposes and requirements of this Chapter. However, lack of such education shall not be a defense to a violation of this Chapter.

Section 4: Other Requirements and Prohibitions

(A) No ash can, ashtray, or other Smoking or Tobacco Product-specific waste receptacle shall be placed in any area in which Smoking is prohibited by this Chapter.

(B) No Person shall permit Smoking or the use of Tobacco Products or Electronic Aerosol Delivery Systems in an area under the Person's control in which Smoking or the use of Tobacco Products or Electronic Aerosol Delivery Systems is prohibited by this Chapter;

(C) The Department of _____ shall issue requirements about the content and placement of signage advising the public of the restriction on use of Tobacco Products and Electronic Aerosol Delivery Systems and/or Smoking in the designated areas.

(D) The presence of Smoking or Tobacco Product-specific waste receptacles in violation of subsection (A) and the absence of signs required by subsection (C) shall not be a defense to a violation of any provision of this Chapter.

(E) No Person or employer shall discharge, refuse to hire, or in any manner retaliate against an employee, applicant for employment, or customer because that employee, applicant, or customer exercises any rights afforded by this Chapter or reports or attempts to report a violation of this Chapter.

Section 5: Penalties and Enforcement

(A) The remedies provided by this Chapter are cumulative and in addition to any other remedies available at law or in equity.

(B) Each instance of Smoking or Tobacco Product or Electronic Aerosol Delivery System use in violation of this Chapter shall constitute a separate violation. For violations other than Smoking or Tobacco Product or Electronic Aerosol Delivery System use, each day of a continuing violation of this Chapter shall constitute a separate violation.

(C) Causing, permitting, aiding, abetting, or concealing a violation of any provision of this Chapter shall also constitute a violation of this Chapter.

(D) Each violation of this Chapter constitutes an infraction subject to a **one hundred dollar (\$100)** fine.

(E) Enforcement of this Chapter shall be the responsibility of _____. In addition, any peace officer or code enforcement official may enforce this Chapter.

(F) Any violation of this Chapter is hereby declared to be a nuisance.

(G) In addition to other remedies provided by this Chapter or by other law, any violation of this Chapter may be remedied by a civil action brought by the City Attorney, including, but not limited to, administrative or judicial nuisance abatement proceedings, code enforcement proceedings, and suits for injunctive relief.

(H) Nothing in this Chapter shall create a right of action in any Person against the City or its agents to compel public enforcement of this Chapter against private parties.

(I) Any Person may bring a civil action to enjoin a violation of this Chapter by a business or to enjoin repeat violations of this Chapter by an individual.

Section 6: Statutory Construction & Severability

The provisions of this Chapter are declared to be severable, and if any section of this Chapter is held to be invalid, such invalidity shall not affect the other provisions of this Chapter that can be given effect without the invalidated provision.

Section 7: Effective Date

The effective date of this ordinance shall be sixty (60) days from the date of its enactment.



¹ U.S. DEP'T OF HEALTH & HUMAN SERVS., THE HEALTH CONSEQUENCES OF SMOKING-50 YEARS OF PROGRESS: A REPORT OF THE SURGEON GENERAL, 11 (2014).

² U.S. DEP'T OF HEALTH & HUMAN SERVS., THE HEALTH CONSEQUENCES OF SMOKING-50 YEARS OF PROGRESS: A REPORT OF THE SURGEON GENERAL 678 (2014).

³ N.Y. Dep't of Health, Smoking and Tobacco Use—Cigarettes and Other Tobacco Products, https://www.health.ny.gov/prevention/tobacco_control/ (last visited Aug. 11, 2016).

⁴ 2014 SURGEON GENERAL'S REPORT, *supra* note 1, at Message from Howard Koh; Ctrs. for Disease Control and Prevention, Youth and Tobacco Use, http://www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/.

⁵ N.Y. Dep't of Health, Smoking and Tobacco Use—Cigarettes and Other Tobacco Products, https://www.health.ny.gov/prevention/tobacco_control/ (last visited Aug. 11, 2016)

⁶ Campaign for Tobacco Free Kids, The Toll of Tobacco in New York (2016), https://www.tobaccofreekids.org/facts_issues/toll_us/new_york (last visited Aug. 11, 2016).

⁷ U.S. DEP'T OF HEALTH & HUMAN SERVS., THE HEALTH CONSEQUENCES OF SMOKING-50 YEARS OF PROGRESS: A REPORT OF THE SURGEON GENERAL-11 (2014).

⁸ N.Y. Dep't of Health, Smoking and Tobacco Use—Cigarettes and Other Tobacco Products, https://www.health.ny.gov/prevention/tobacco_control/

⁹ N.Y. Dep't of Health, Smoking and Tobacco Use—Cigarettes and Other Tobacco Products, https://www.health.ny.gov/prevention/tobacco_control/

¹⁰ U.S. DEP'T OF HEALTH & HUMAN SERVS., THE HEALTH CONSEQUENCES OF SMOKING-50 YEARS OF PROGRESS: A REPORT OF THE SURGEON GENERAL 12 (2014).

¹¹ U.S. DEP'T OF HEALTH & HUMAN SERVS., THE HEALTH CONSEQUENCES OF SMOKING-50 YEARS OF PROGRESS: A REPORT OF THE SURGEON GENERAL 49, 112 (2014). Nicotine exposure at a young age may cause lasting harm to brain development and promote nicotine addiction and lead to sustained tobacco use – all nicotine product use is therefore a major concern. *Id.* at 125-126; Ctrs. for Disease Control & Prevention, You(th) & Tobacco, http://www.cdc.gov/tobacco/basic_information/youth/information-sheet/index.htm; Ctrs. for Disease Control & Prevention, Youth and Tobacco Use, http://www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/index.htm.

¹² Tushar Singh, et al., *Tobacco Use among Middle and High School Students – United States, 2011-2015*, 65 MORBIDITY AND MORTALITY WEEKLY REPORT 361, 364 (April 17, 2016).

¹³ Dutra and Glantz, *E-Cigarettes and Conventional Cigarette Use among US Adolescents: A Cross-sectional Study*, 168 JAMA PEDIATRICS 610, 610 (2014); Adam M. Leventhal et al., *Association of Electronic Cigarette Use with Initiation of Combustible Tobacco Product Smoking in Early Adolescence*, 314 J. AM. MED. ASS'N. 700, 706 (2015); Thomas A Wills et al., *E-cigarette Use and Willingness to Smoke: a Sample of Adolescent Non-smokers*, TC ONLINE FIRST, 1 (August 10, 2015); Brian A. Primack, et al., *Progression to Traditional Cigarette Smoking after Electronic Cigarette Use among US Adolescents and Young Adults*, 169 JAMA PEDIATRICS 1018, 1022-1023 (2015); see Graham F. Moore et al., *E-Cigarette Use and Intentions to Smoke among 10-11-year-old Never-Smokers in Wales*, 25 TOBACCO CONTROL 147, 152 (2016) (finding e-cigarette use associated with weaker antismoking intentions); see also Andrea C. King et al., *Passive Exposure to Electronic Cigarette (E-cigarette) Use Increases Desire for Combustible and E-cigarettes in Young Adult Smokers*, 24 TOBACCO CONTROL 501, 504 (2015); Rebecca E. Bunnell, *Intentions to Smoke Cigarettes among Never-Smoking U.S. Middle and High School Electronic Cigarette Users, National Youth Tobacco Survey, 2011-2013*; 17 NICOTINE & TOBACCO RESEARCH 228, 234 (2015) (finding e-cigarette use among never-smokers associated with intentions to smoke); c.f. Abigail S. Friedman, *How Do Electronic Cigarettes Affect Adolescent Smoking?*, 44 J. HEALTH ECON. 300 (2015) (finding youth smoking decreases with access to e-cigarettes).

¹⁴ See Charlotte A. Schoenborn et al., *Electronic Cigarette Use among Adults: United States, 2014*, NAT'L CTR. FOR HEALTH STATISTICS DATA BRIEF No. 217 (October 2015) (finding that among adults, recent former smokers and current smokers who had unsuccessfully tried to quit in the last year were more likely to use e-cigarettes).

¹⁵ *E.g.*, TAKE BACK YOUR FREEDOM FEATURING STEPHEN DORFF-BROUGHT TO YOU BY BLU ELECTRONIC CIGARETTES (Mar 5, 2013), <https://www.youtube.com/watch?v=gGAhXv23MEs&oref=https%3A%2F%2F> (“You can smoke at a basketball game if you want to. And how about not having to go outside every 10 minutes when you’re at a bar with your friends? The point is, you can smoke Blu virtually anywhere.”); See Americans for Nonsmokers’ Rights, Statement on FDA Electronic Cigarette Regulations (August 8, 2016) (expressing concern that e-cigarettes are being marketed as something that can be used in workplace despite smoke-free laws); see also Sara Kalkhoran & Stanton A Glantz, *E-cigarettes and Smoking Cessation in Real-World and Clinical Settings: a Systematic Review and Meta-analysis*, 4 LANCET RESPIR. MED. 116, 116 (2016) (reporting nicotine use in areas where smoking is prohibited as a motivating factor driving e-cigarette use).

¹⁶ Deeming Tobacco Products to Be Subject to the Federal Food, Drug & Cosmetic Act, as Amended by the Family Smoking Prevention and Tobacco Control Act; Restrictions on the Sale and Distribution of Tobacco Products and Required Warning Statements for Tobacco Products, 81 Fed. Reg. 29,028 (May 10, 2016) (to be codified as 21 C.F.R. pts. 1100, 1140, and 1143).

¹⁷ Tianrong Cheng, *Chemical Evaluation of Electronic Cigarettes*, 23 TOBACCO CONTROL ii11, ii16 (2014); Rachel Grana, et al., *E-Cigarettes: A Scientific Review*, 129 CIRCULATION 1972, 1978 (2014); Vicky Yu, et al., *Electronic Cigarettes Induce DNA Strand Breaks and Cell Death Independently of Nicotine in Cell Lines*, 52 ORAL ONCOL. 58, 62-64 (2016).

¹⁸ TRUTH INITIATIVE, VAPORIZED: YOUTH AND YOUNG ADULT EXPOSURE TO E-CIGARETTE MARKETING (November 2015), <http://truthinitiative.org/research/vaporized-majority-youth-exposed-e-cigarette-advertising> (last visited Aug. 12, 2016).

¹⁹ U.S. FOOD & DRUG ADMIN., SUMMARY OF RESULTS: LABORATORY ANALYSIS OF ELECTRONIC CIGARETTES CONDUCTED BY FDA (last updated Apr. 22, 2014) <http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm173146.htm> (last visited Aug. 12, 2016); see Tianrong Cheng, *Chemical Evaluation of Electronic Cigarettes*, 23 TOBACCO CONTROL ii11, ii16 (2014) (finding nicotine content may vary considerably from label information).

²⁰ JONATHAN THORNBURG ET AL., RTI INTERNATIONAL, EXHALED ELECTRONIC CIGARETTE EMISSIONS: WHAT’S YOUR SECONDHAND EXPOSURE? (March 2015), available at https://www.rti.org/pubs/secondhand_exposure_to_electronic_cigarette_emissions.pdf (last visited Aug. 12, 2016) (nonuser may be exposed to aerosol particles similar in size to tobacco smoke and diesel engine smoke); see also AMERICANS FOR NONSMOKERS’ RIGHTS, ELECTRONIC SMOKING DEVICES AND SECONDHAND AEROSOL (2016), available at <http://www.no-smoke.org/pdf/ecigarette-secondhand-aerosol.pdf> (last visited Aug. 12, 2016); see also RL Grana, et al., *E-cigarettes: a scientific Review*, 129 CIRCULATION 1972, 1972 (2014); TRUTH INITIATIVE, VAPORIZED: YOUTH AND YOUNG ADULT EXPOSURE TO E-CIGARETTE MARKETING, 2 (November 2015).

²¹ See Vicky Yu, et al., *Electronic Cigarettes Induce DNA Strand Breaks and Cell Death Independently of Nicotine in Cell Lines*, 52 ORAL ONCOL. 58, 62-64 (2016) (finding vaporized e-liquids cause harm to cells); AMERICANS FOR NONSMOKERS’ RIGHTS, ELECTRONIC SMOKING DEVICES AND SECONDHAND AEROSOL (January 2016), available at <http://www.no-smoke.org/pdf/ecigarette-secondhand-aerosol.pdf> (noting that many elements in e-cigarette emissions are known to cause respiratory distress and disease).

²² Deeming Tobacco Products To Be Subject to the Federal Food, Drug, and Cosmetic Act, as Amended by the Family Smoking Prevention and Tobacco Control Act; Restrictions on the Sale and Distribution of Tobacco Products and Required Warning Statements for Tobacco Products, 81 Fed. Reg. 29,029-29,034 (May 10, 2016) (to be codified at 21 C.F.R. pts. 1100, 1140 & 1143).

²³ Deeming Tobacco Products To Be Subject to the Federal Food, Drug, and Cosmetic Act, as Amended by the Family Smoking Prevention and Tobacco Control Act; Restrictions on the Sale and Distribution of Tobacco Products and Required Warning Statements for Tobacco Products, 81 Fed. Reg. 29,028 (May 10, 2016) (to be codified at 21 C.F.R. pts. 1100, 1140 & 1143).

²⁴ Ctrs. for Disease Control & Prevention, Smokeless Tobacco: Health Effects, http://www.cdc.gov/tobacco/data_statistics/fact_sheets/smokeless/health_effects/index.htm; NATIONAL CANCER INSTITUTE, SMOKELESS TOBACCO AND CANCER, available at <http://www.cancer.gov/about-cancer/causes-prevention/risk/tobacco/smokeless-fact-sheet>.

²⁵ See National Cancer Institute, Smokeless Tobacco and Cancer, <http://www.cancer.gov/about-cancer/causes-prevention/risk/tobacco/smokeless-fact-sheet> (identifying at least 28 cancer-causing chemicals in smokeless tobacco).

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