









TOBACCO PRODUCT WASTE MODEL POLICY

for New York State

PUBLIC HEALTH

AW CENTER



This model ordinance was prepared for municipalities and counties in New York State interested in reducing tobacco product waste and pollution in the local environment. Tobacco product waste includes any discarded tobacco product, such as cigarette butts and electronic smoking devices and their components, including batteries, cartridges, and plastic casing.

The most common form of tobacco product waste is discarded cigarette butts. 1 The environmental impact of tobacco product waste is significant. As municipalities and counties become aware of this impact, they are taking steps to mitigate the environmental destruction and pollution resulting from tobacco product waste.





Each year, more than 4.5 trillion cigarette butts are improperly discarded worldwide.² Discarded cigarette butts are not biodegradable and are made of cellulose acetate, which is a kind of plastic. As they physically break apart, cigarette butts leach microplastics into the environment, which contaminate the soil and water.³ Used cigarette butts leach toxic amounts of nicotine, pesticides, polycyclic aromatic hydrocarbons, arsenic, and heavy metals such as lead and cadmium, potentially for years after use.⁴ Unsmoked cigarette filters are toxic to animals, plants, and aquatic life.⁵ Discarded cigarette butts are also a major cause of fires and wildfires, equaling hundreds of millions of dollars in annual costs in environmental damage, personal property losses, firefighting expenses, and restorative efforts.⁶

E-cigarettes are also an environmental hazard. E-cigarette cartridges contain hazardous substances including nicotine — an acutely hazardous waste regulated by the EPA⁷ — as well as other potentially harmful materials, such as formaldehyde, acetaldehyde, benzene, and toluene. Discarded devices may leach lead, cobalt, and other substances into the environment in toxic amounts. Toxic chemicals from commercial tobacco product waste can accumulate in the soil and water, negatively impacting wildlife and aquatic ecosystems. Lithium-ion batteries, which are found in rechargeable e-cigarettes, have also been known to explode and catch fire, posing a risk to public safety.⁸ For more information on tobacco product waste, see the Public Health Law Center's publication *Tobacco Product Waste: A Public Health and Environmental Toolkit*.⁹

Although this ordinance focuses on tobacco product waste, environmental harms are also directly related to tobacco agriculture, manufacturing, and production.¹⁰ Also, it is worth noting that addition to the hazardous environment impact of tobacco products, the use of these products poses multiple well-documented risks to human health.¹¹

Customizing the Ordinance

Context boxes are included throughout the ordinance to explain several key provisions. These boxes are not meant to be included in any final ordinance. In some instances, blanks (such as [_____]) prompt you to customize the language to fit your community's needs. A degree of customization is always necessary to make sure the ordinance is consistent with a community's existing laws. Such customization also ensures that communities are using the model ordinance to address local public health needs. Also, many economically challenged geographic areas tend to have a greater number of commercial tobacco retailers and be more impacted by environmental pollution, including tobacco waste, than higher income areas. Thus, tailoring the model ordinance can provide you with the opportunity to help address health disparities in a community and at the same time advance health equity.





Tips for Using This Model Ordinance

The best possible world is one without the death and health harms caused by commercial tobacco use and exposure to secondhand and thirdhand smoke. Communities differ on their readiness and willingness to adopt certain commercial tobacco control policies that are intended to achieve this ideal.

If you're working on New York State commercial tobacco control issues and need assistance, contact the Public Health Law Center at (651) 290-7506 or PHLC.NYS@mitchellhamline.edu.

This model ordinance represents a balance among best public health policy practices, advancing health equity, and practicality for local governments. This ordinance may be adopted as a stand-alone ordinance or may be revised and incorporated into an existing environmental ordinance, depending upon the needs of the locale.

Contact us for assistance! This model ordinance was prepared by the Public Health Law Center, a nonprofit organization that provides information and legal technical assistance on issues related to public health, and was made possible through a contract with the New York State Department of Health. The Center does not provide legal representation or advice. The information in this document should not be considered legal advice.



AN ORDINANCE REGULATING TOBACCO PRODUCT WASTE

IN THE [MUNICIPALITY /COUNTY OF _____].

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The [municipal council/county board of supervisors] of [insert jurisdiction name] does ordain as follows:

Section I. [Findings]

Comment

See Appendix for sample findings tailored to accompany the policies set forth below. The findings section is part of the ordinance and legislative record, but it usually does not become codified in the municipal code. An ordinance based on this draft should include findings of fact — data, statistics, relevant epidemiological information, for instance — that support the purposes of the ordinance, as well as any legal precedent that directly supports the ordinance. In addition to serving an educational purpose and reflecting community support for the ordinance, the findings can also serve a legal purpose. If challenged in court, the findings are an admissible record of the factual determinations made by the legislative body when considering the ordinance. Courts will generally defer to legislative determinations of factual issues, which often influence legal conclusions. A list of findings supporting this model ordinance appears in the Appendix. Jurisdictions may select findings from that list to include or adjust, along with additional findings on local or regional conditions, outcomes, and issues that help make the case for the policy.

Section II. [Purpose]

This policy is designed to reduce the amount of tobacco product waste in a community and protect the environment from the harms of such waste.



- (A) [Name of municipality/county] must take concrete steps to reduce the amount of tobacco product waste generated from these products, 12 and impose responsibility on tobacco manufacturers, distributors, and retailers to minimize the environmental impact of tobacco product waste.
- (B) The [municipality/county] of [name] recognizes that tobacco product waste seriously harms the environment by polluting the water, air, and soil with chemicals and microplastics.
- (C) The [municipality/county] of [name] recognizes that it must act to reduce the amount of tobacco product waste in its community and mitigate the harmful impacts of such waste.
- (D) The [municipality/county] of [name] recognizes that it must account for and mitigate the disproportionate impacts on disadvantaged communities when implementing solutions to these problems.
- (E) The [municipality/county] of [name] recognizes that it must hold tobacco distributors and retailers accountable for introducing a stream of hazardous waste in the form of tobacco products into local communities.

THEREFORE, the [municipality/county] of [name] adopts the following policy regarding waste created by the use of commercial tobacco products:

Section III.

[Article/Chapter] of the [municipality/county] of [Municipal/County Code] is hereby amended to read as follows:

Sec. [_____(*1)]. Definitions.

The following words and phrases, whenever used in this [article/chapter], shall have the meanings defined in this section unless the context clearly requires otherwise.

- (A) "Cigarette" means: (1) any roll of tobacco wrapped in paper or in any substance not containing tobacco; and (2) any roll of tobacco wrapped in any substance containing tobacco which, because of its appearance, the type of tobacco used in the filler, or its packaging and labeling, is likely to be offered to, or purchased by, consumers as a cigarette.
- (B) "Disadvantaged community" means:
 - Geographic areas disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation;



- (2) Geographic areas with concentrations of people that have high unemployment, low levels of homeownership, high rent burden, or low levels of educational attainment;
- (3) Geographic areas with an annual median household income that is less than 80 percent of the statewide annual median household income; or
- (4) Geographic areas that were historically redlined, or experienced intentional, systematic discriminatory disinvestment due to the population's racial or ethnic makeup.
- (C) "Disposable e-cigarette" refers to an electronic smoking device that cannot be recharged or refilled and must be thrown out once it has run out.
- (D) "Electronic smoking device" means any device that may be used to deliver any aerosolized or vaporized substance to the person inhaling from the device, including, but not limited to, an e-cigarette, e-cigar, e-pipe, vape pen, or e-hookah. Electronic smoking device includes any component, part, or accessory of the device, and also includes any substance that may be aerosolized or vaporized by such device, whether or not the substance contains nicotine. Electronic smoking device does not include drugs, devices, or combination products authorized for sale by the U.S. Food and Drug Administration, as those terms are defined in the Federal Food, Drug, and Cosmetic Act.
- (E) "Environmental Impact Assessment" is an assessment of planned activities on the local environment, including the soil, water, and air, and the impact on the health of local populations close to the activity.
- (F) "Extended Producer Responsibility" programs that require product manufacturers to take responsibility for the entire lifecycle of a product, from production to disposal.¹⁴
- (G) "Manufacturer" means any entity, including any repacker or relabeler, who manufactures, fabricates, assembles, processes, or labels a tobacco product; or imports a finished tobacco product for sale or distribution into the United States.
- (H) "School" means [name of school/any public nursery, day care center, child care facility, Head Start program, kindergarten, elementary, secondary school, alternative learning center or adult education center] operated under the control of [district name].
- (I) "School property" means all facilities and property, including land, whether owned, rented, or leased by [district/school name], and all vehicles owned, leased, rented, contracted for, or controlled by [district/school name] used for transporting students, staff, or visitors.



- (J) "Signage" means signs declaring that all [district/school name] school property is tobacco-free.
- (K) "Single-use tobacco product" means any product made of, or derived from tobacco or nicotine, including synthetic nicotine, that is intended for human consumption and is designed to be chewed or held in the mouth, including but not limited to products commonly recognized or labeled as chewing tobacco, nicotine pouches, or snus. It includes any tobacco product incorporating a mouthpiece or filter made of any material, including, but not limited to, plastic, cellulose acetate or other fibrous plastic material, or any organic or biodegradable material, as well as tobacco products generally recognized or labeled as filtered cigarettes, filtered little cigars, filtered cigars, cigarillos, and cigars with tips, snus in oral pouches, and tips, mouthpieces, or filters for tobacco products sold separately. "Single-use tobacco product" also includes electronic smoking devices including disposable e-cigarettes that cannot be recharged or refilled. "Single-use tobacco product" does not include tobacco or nicotine products that are used to fill other tobacco products (e.g., loose tobacco or electronic smoking substances sold in containers used to refill electronic smoking devices), pipes used with loose tobacco, hookahs used with shisha, nor does it include cigarettes or cigars without filters or tips.
- (L) "Smoking" means inhaling, exhaling, burning, or carrying any lighted or heated cigar, cigarette, or pipe, or any other lighted or heated product containing, made, or derived from nicotine, tobacco, marijuana, or other plant, whether natural or synthetic, that is intended for inhalation. "Smoking" also includes carrying or using an activated electronic smoking device.
- (M) "Staff" means any person employed by [district/school name] as full or part-time, or any position contracted for or otherwise employed, with direct or indirect monetary wages or compensation paid by [district/school name], or anyone working on a volunteer basis. This term includes, but is not limited to, faculty, service personnel, volunteers, chaperones, student teachers, adult classroom or student aides, and other adults working for [district/school name].
- (N) "Student" means any person enrolled in [district/school name]'s educational system.
- (O) "Tobacco Product" means:
 - (1) any product containing, made of, or derived from tobacco or nicotine, including synthetic nicotine, that is intended for human consumption or is likely to be consumed, whether inhaled, absorbed, or ingested by any other means, including but not limited to, a cigarette, a cigar, pipe tobacco, chewing tobacco, snuff, or snus;



- (2) any electronic smoking device and any substances that may be aerosolized or vaporized by such device, whether or not the substance contains nicotine; or
- (3) any component, part, or accessory of (1) or (2), whether or not any of these contains tobacco or nicotine, including but not limited to filters, rolling papers, blunt or hemp wraps, hookahs, mouthpieces, and pipes.
- "Tobacco product" does not mean drugs, devices, or combination products authorized for sale and approved by the U.S. Food and Drug Administration for cessation purposes, as those terms are defined in the Federal Food, Drug, and Cosmetic Act.
- (P) "Tobacco product waste" includes any used and discarded tobacco product, such as cigarette butts and electronic smoking devices and their components, including batteries, cartridges, and plastic casing.
- (Q) "Tobacco retailer" means any entity that sells, offers for sale, or exchanges or offers to exchange for any form of consideration, tobacco products. This definition is without regard to the quantity of tobacco products sold, offered for sale, exchanged, or offered for exchange.
- (R) "Youth-Oriented Facility" means a parcel in the [municipality/county] that is occupied by:
 - (1) a private or public kindergarten, elementary, middle, junior high, or high school;
 - (2) a library open to the public;
 - (3) a playground open to the public;
 - (4) a youth center, defined as a facility where children, ages 6 to 17, inclusive, come together for programs and activities;
 - (5) a recreation facility open to the public, defined as an area, place, structure, or other facility that is used either permanently or temporarily for community recreation, even though it may be used for other purposes;
 - (6) a park open to the public or to all the residents of a private community;
 - (7) a licensed child-care facility or preschool;
 - (8) or any other facility frequented by youth



Sec. [_____(*2)]. Licensing Restrictions

- (A) RETAILER DENSITY. [Name of municipality/county] prohibits tobacco retail licenses from being issued to retailers located within 1,000 feet of a state, county, or local park or nature preserve.¹⁵
- (B) ENVIRONMENTAL IMPACT ASSESSMENT. [Name of municipality/county] will conduct an Environmental Impact Assessment (EIA) to determine a community's environmental health and whether a specific neighborhood or community has been disproportionately impacted by environmental pollution, and will consider the results of the assessment before issuing a tobacco retail license or waste facility permit near that community.¹⁶

Comment

New York State law may already require an environmental impact assessment if the proposed project meets certain criteria. Municipalities should familiarize themselves with the State Environmental Quality Review Act (SEQR) and its requirements.¹⁷ An action is subject to the SEQR if "any state or local agency has authority to issue a discretionary permit, license or other type of approval for that action, or if an agency funds or directly undertakes a project or adopts a resource management plan, rule or policy that affects the environment."¹⁸ Therefore, certain local actions may already be subject to a state-required Environmental Impact Assessment. Municipalities may also want to develop their own local criteria for EIAs, using the state criteria¹⁹ as a guide.

(C) DISADVANTAGED COMMUNITIES. No license may be issued, and no existing license may be renewed, to authorize tobacco retailing within a disadvantaged community. If any person submits evidence suggesting a license was or will be issued within a disadvantaged community, the license will be suspended until the tobacco retailer has demonstrated by clear and convincing evidence that the area does not meet the definition of disadvantaged community, and the [city council/board of supervisors] solicits and considers oral and written public comment regarding the tobacco retailer's submission before taking final action. A tobacco retailer who has made a sufficient showing under this section will not be required to make another showing on this issue for 12 months, or until its next permit application, whichever comes first.



Comment

If a jurisdiction wants to phase in this type of policy more slowly, it could add a "hardship waiver" system (or a limited number of license renewals) to allow existing retailers in these neighborhoods to continue retailing only for the time necessary to recover reasonable sunk costs and transition to another type of business or different location. Issuing a tobacco retail license is a privilege, not a right, and jurisdictions have the authority to grant or deny tobacco retailer licenses. It would be unlikely for a tobacco retailer to successfully argue that refusing to renew its license is a violation of the constitutional guarantee against taking property without due process (called a "taking")²⁰. To deal with potential "takings" claims, some jurisdictions have created a hearing process for affected businesses where they can make hardship arguments and ask for additional time to sell prohibited products, allowing for some flexibility on a case-by-case basis and under extraordinary circumstances.

Sec. [(*3)].	Prohibition	of Single-Use	Tobacco	Products a	nd Dispos	able
E-cigarettes							

(A) TOBACCO PRODUCT WASTE SALES PROHIBITION. [Name of municipality/county] will prohibit the sale of all single-use tobacco products and disposable e-cigarette devices, ²¹ as well as tobacco products packaged for retail sale in unrecyclable packaging. This prohibition does not apply to child-resistant packaging.

Note: According to federal law, all child-resistant liquid nicotine packaging is likely to be unrecyclable because federal standards require²² it to be single-use, and the container will have leftover nicotine solution even after it has been used by an end consumer. Without cleaning the container with a method consistent with federal hazardous waste law, these containers remain contaminated and are unlikely to be recyclable. The exception to prohibition (A) above allows for the sale of electronic smoking solution refill containers that comply with federal law, and normally will have to be disposed of as hazardous waste or household hazardous waste. Removing that exception would likely make the sale of all electronic smoking substances such as e-liquids impracticable in the jurisdiction, though retailers could still sell electronic smoking devices without such substances so long as the electronic smoking devices did not fall within the definition of single-use tobacco products.

(B) CONFISCATION. Prohibited products and devices offered for sale in violation of this ordinance are subject to seizure by [______] and will be forfeited after the licensee, or



any other owner of the tobacco products and devices seized, is given reasonable notice and an opportunity to demonstrate that the products and devices were not offered for sale in violation of this ordinance. The decision to seize these items may be appealed pursuant to procedures set forth in [Article/Chapter]. Forfeited products and devices will be properly disposed of consistent with state and federal environmental law at the cost of the seller after all internal appeals have been exhausted.

(C) BURDEN OF PROOF. A tobacco retailer bears the burden of proof to show with clear and convincing evidence that any tobacco product it offers for sale is not prohibited by [subsection (A)]. Statements that a product or packaging is "recyclable" without further proof and detail are not sufficient evidence to make such a showing.

(D) Additional Remedies

- (a) The remedies provided by this [article/chapter] are cumulative and in addition to any other remedies available at law or in equity.
- (b) Whenever evidence of a violation of this [article/chapter] is obtained in any part through the participation of a person under the age of 21 years, such a person shall not be required to appear or give testimony in any civil or administrative process brought to enforce this [article/chapter] and the alleged violation shall be adjudicated based upon the sufficiency and persuasiveness of the evidence presented.
- (c) Violations of this [article/chapter] are subject to a civil action brought by the [district attorney] or the [county counsel], punishable by a civil fine not less than [\$250] and not exceeding [\$1,000] per violation.
- (d) Violations of this [article/chapter] may, in the discretion of the [district attorney/ county counsel], be prosecuted as infractions or misdemeanors when the interests of justice so require.
- (e) Violations of this [article/chapter] are hereby declared to be public nuisances.
- (f) In addition to other remedies provided by this [article/chapter] or by other law, any violation of this [article/chapter] may be remedied by a civil action brought by the [district attorney/county counsel], including administrative or judicial nuisance abatement proceedings, civil code enforcement proceedings, and suits for injunctive relief.



(g) For the purposes of the civil remedies provided in this [article/chapter]: (1) Each day on which a tobacco product is distributed, sold, or offered for sale in violation of this [article/chapter] shall constitute a separate violation of this [article/chapter]; and (2) Each individual tobacco product that is distributed, sold, or offered for sale in violation of this [article/chapter] shall constitute a separate violation of this [article/chapter]. (I) All tobacco retailers are responsible for the actions of their employees relating to the sale, offer to sell, and furnishing of tobacco products at the retail location. The sale of any tobacco product by an employee shall be considered an act of the tobacco retailer.

Sec.	[(*4)].	Exce	ptions
	L	(./].		JO 61 0 1 10

- (A) Nothing in this [article/chapter] prevents the provision of tobacco products to any person as part of an Indigenous or tribal practice or a lawfully recognized religious or spiritual ceremony or practice.
- (B) Nothing in this [article/chapter] shall be construed to penalize the purchase, use, or possession of a tobacco product by any person not engaged in tobacco retailing.

Sec.	Γ	(*5)	. Extended	Producer	Respon	sibility ²
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(A) COST OF DISPOSAL. Tobacco distributors whose products are sold within [name of municipality/county] must pay a predetermined amount of \$[xxxx] per pounds of product distributed, to the jurisdiction to assist with the cost of disposing of prohibited products.

Comment

The cost of cleanup may be factored into retailer licensing fees, or may be a standalone fee that is levied on the distributors and/or retailers. Adjusting licensing fees to reflect the cost of disposal may be a more streamlined approach. The retailers would then adjust their dealings with distributors accordingly if they wish to recoup the additional cost.

Sec.	[(*6)].	Tobacco	Product	Waste	Disposal
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(A) ELECTRONIC CIGARETTE DISPOSAL. The [municipality/county] of [name] will install vape disposal boxes in several locations, including the town/city hall, the police station, and [other locations that make sense for the locality in question, and are accessible to the public, such as a bus depot, train station, or local mall], to the extent practical and safe.



- These boxes will be temperature-controlled and be emptied at least every six months. QR codes on these boxes will link to cessation services, such as the New York State QUIT line and the Drop the Vape cessation text line.
- (B) SCHOOL POLICY. All schools will have a vape disposal system in place, with amnesty for students who dispose of these devices, and cessation resources available to assist students looking to quit. The [municipality/county] of [name] will install vape disposal boxes inside all middle and high schools. QR codes on these disposal boxes will link to cessation services, such as the school counselor's contact information and the New York State QUIT Line. These boxes must be temperature-controlled and emptied at least every six months.
- (C) RETAILERS. All tobacco retailers will install a vape disposal box and allow customers to dispose of their e-cigarette products without charge in this box. The box will be temperature-controlled, and emptied by the locality's hazardous waste contractor at least every six months.
- (D) HAZARDOUS WASTE REMOVAL. The [municipality/county] of [name] will contract with a hazardous waste company for the disposal of electronic smoking devices. Local waste facilities will work with the hazardous waste company for proper disposal of electronic smoking devices consistent with state and federal environmental law.
- (E) CIGARETTE BUTTS. The [municipality/county] of [name] will implement no smoking zones in accordance with its tobacco-free outdoors policy²⁴ and designate enforcement and cleanup responsibility to parties that control the no-smoking spaces.

Sec.	Γ	(*7) 1.	Public	Awareness	Campaign
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(A) PUBLIC EDUCATION. The [municipality/county] of [name] will fund an awareness campaign to educate the public about the hazard of cigarette butt and e-cigarette waste. "No smoking/vaping" signs will be accompanied by informational signs raising awareness about tobacco product waste, including information stating that electronic smoking devices cannot be thrown into the regular trash or recycling, and asking people not to throw cigarette butts onto the ground, with information about how long it takes for cigarette butts to break down and the toxic chemicals leached by cigarette butts and e-cigarettes.

Comment

SCHOOLS. Given the epidemic of youth vaping, creating awareness about the risk of tobacco product waste among youth is incredibly important. Since schools are facing serious challenges as



a result of accumulated tobacco product waste, they are a key arena in which to raise awareness. One way to raise awareness could include incorporating lessons on the environmental issues caused by tobacco product waste into school lessons, such as in science class. Jurisdictions with the authority to influence their school curriculum may want to implement these changes. Lessons could include the negative health impacts of smoking and vaping; the toxicity of cigarette butts and electronic smoking devices, the harms of littering and improperly disposing of tobacco product waste, the associated fire hazards, and the negative impact on soil, air, and water. If it is not possible to include this information in a lesson plan, awareness could also be raised in schools by poster campaigns advertising the environmental harms of tobacco product waste and information on cessation resources, such as the New York State Smokers' Quitline and the New York State-specific Drop the Vape text messaging program for youth and young adults aged 13 to 24.

Appendix: Research Findings

- 1. Tobacco product waste includes cigarette butts and electronic cigarettes (also known as "vapes").
- 2. Cigarette butts are the most littered item on the planet, with approximately 850,000 tons²⁵ littered each year.
- 3. Approximately 65 percent of cigarette butts are littered intentionally.²⁶
- 4. Cigarette butts are made of cellulose acetate, which is a type of plastic, and are not biodegradable.
- 5. Cellulose acetate breaks down²⁷ into thousands of tiny microplastic fibers, with each cigarette butt releasing between 12 and 15 thousand little fibers.²⁸
- 6. Cigarette butts leach more than 7,000 toxic chemicals and heavy metals like lead, cadmium, arsenic, and formaldehyde, of which more than 50 are carcinogenic.²⁹
- 7. Cigarette butts take from ten to fourteen years to decompose.³⁰
- 8. Cigarette butts also represent a fire hazard, as most users discard them without extinguishing the butts.³¹
- 9. Cigarette filters do not improve health outcomes, as smokers tend to pull harder on the cigarette and inhale carcinogenic smoke more deeply when using a "filter," thus increasing the risk of lung cancer.³²



- 10. Cigarette butt litter comprises 30 percent of the waste collected from all coasts in the last three decades,³³ and 19 percent of all marine debris that is collected.³⁴
- 11. Approximately 1 billion cigarette butts are smoked annually in western New York state.³⁵
- 12. In 2019, 339,716 cigarette butts, 44,822 cigar tips, and 1,868 other tobacco product waste items were collected from the Great Lakes region, including Lake Erie.³⁶
- 13. In New York State, in combined sewer overflows in the estuaries of the Hudson River and the river itself, cigarette butts are one of the most commonly seen objects.³⁷
- 14. One cigarette butt can contaminate 100 liters of water.³⁸
- 15. Despite some companies' claims of being able to "recycle" cigarette butts, there are no good uses for spent cigarette butts, which are full of toxic chemicals.³⁹
- 16. E-cigarettes are both hazardous waste and electronic waste ("e-waste").40
- 17. E-cigarette cartridges contain concentrated amounts of nicotine liquid ("juice"), which is considered hazardous waste.⁴¹
- 18. Concentrated nicotine is incredibly harmful if it is ingested or comes in contact with human skin.⁴²
- 19. The lithium batteries in e-cigarettes are prone to explosions and fires, and have caused at least two deaths in the United States.⁴³
- 20. E-cigarettes have been marketed as "disposable" by the industry, so they are regularly thrown in the normal trash, and/or littered.
- 21. About 53 percent of all e-cigarettes sold are disposable, meaning they cannot be refilled and used again after the initial cartridge runs out.⁴⁴
- 22. E-cigarettes have been advertised as cessation devices, but there is inadequate evidence to suggest that this is the case,⁴⁵ and to date the U.S. Food and Drug Administration has not approved of any e-cigarette as a cessation device.⁴⁶
- 23. E-cigarettes create new tobacco users, especially among youth. 47
- 24. Schools collect a massive amount of e-cigarette waste annually.
- 25. In Monroe County, New York, school officials confiscated and collected over 226 pounds of e-cigarettes in 2022. Given that most e-cigarettes weigh between 50 and 250 grams, this is equivalent to thousands of e-cigarettes and their cartridges.⁴⁸



- 26. Less populous and rural areas in New York State are facing the same issue. In Putnam County, New York, officials estimate that approximately 90 pounds of vape devices are confiscated each year.⁴⁹
- 27. In New York City, as of October 19, 2023, authorities have seized over 449,000 packages of illegal flavored e-cigarettes since December 2022.⁵⁰
- 28. Properly disposing of e-cigarettes is expensive. Current disposal methods cost New York City \$1 per device,⁵¹ or about \$1,400 per container of 1,200 confiscated e-cigarettes.⁵²
- 29. "Disposable" vapes have a higher repurchase rate than refillable devices, so retailers and manufacturers make more money off these products.⁵³
- 30. The production of tobacco products is environmentally destructive in other ways as well. For instance, one out of eight trees cut down in the world is used for tobacco production. That is equal to nine million trees annually, significantly reducing forests' ability to absorb carbon, and contributing to up to 5 percent of greenhouse gas emissions worldwide.⁵⁴
- 31. Tobacco product waste is the result of tobacco product production. The more tobacco products are produced, the more likely they are to end up as litter and toxic waste.
- 32. Over 5.5 trillion cigarettes are produced each year, and 15 billion are sold daily.⁵⁵
- 33. In New York State alone, 1.8 million⁵⁶ adults still smoke cigarettes, meaning millions of cigarettes are smoked and discarded per year.⁵⁷
- 34. The greater the number of tobacco retailers in an area, the more cigarettes and e-cigarettes will be sold in that neighborhood, and the more tobacco litter will be created.
- 35. Approximately 21,628 tobacco retailers are registered in the state of New York.⁵⁸
- 36. In the capital of New York State, Albany, a city of about 97,000 people and roughly 22 square miles, there are 285 registered tobacco retailers.⁵⁹



Endnotes

- 1 This resource uses the term "butts" as opposed to "filters" because the term "filter" is a misnomer: so-called cigarette "filters" do not filter out harmful chemicals and do not reduce the harms from cigarette smoke.
- 2 WORLD HEALTH ORG., THE WHO FRAMEWORK CONVENTION ON TOBACCO CONTROL: AN ACCELERATOR FOR SUSTAINABLE DEVELOPMENT 24 (2017) (who.int).
- 3 WORLD HEALTH ORG., TOBACCO AND ITS ENVIRONMENTAL IMPACT 26 (2017), 9789241512497-eng.pdf (who.int).
- 4 Hiroshi Moriwaki et al., *Waste on the Roadside, 'Poi-Sute' Waste: Its Distribution and Elution Potential of Pollutants into Environment*, 29 WASTE MGMT. 3 (2009), https://www.sciencedirect.com/science/article/abs/pii/s0956053X08002882?via%3Dihub.
- 5 See Elli Slaughter, Toxicity of Cigarette Butts, and Their Chemical Components, to Marine and Freshwater Fish, 20 TOBACCO CONTROL i25-i29 (2022), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3088407; Dannielle Green et al., Cigarette Butts have Adverse Effects on Initial Growth of Perennial Ryegrass (gramineae: Lolium perenne L.) and White Clover (Leguminosae: Trifolium repens L.) 182 ECOTOXICOLOGY AND ENVT'L SAFETY 109418 (2019), https://www.sciencedirect.com/science/article/abs/pii/S0147651319307481.
- 6 See, e.g., Wildfire Causes and Evaluations, NAT'L PARK SERV. (Mar. 8, 2022), https://www.nps.gov/articles/wildfire-causes-and-evaluation.htm.
- 7 See Envt'l Protection Agency, Frequent Questions about the Management Standards for Hazardous Waste Pharmaceuticals and Amendment to the P075 Listing for Nicotine Final Rule, https://www.epa.gov/hwgenerators/frequent-questions-about-management-standards-hazardous-waste-pharmaceuticals-and#nicotine
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