

Institute for  
Global Tobacco Control

# Resíduos de produtos de tabaco e meio ambiente

Graziele Grilo, MSc

Program Officer and Regional Lead – Latin America

Reunião de parceiros de controle do tabaco 2025

12 de março de 2025

[Health Topics](#) ▾[Countries](#) ▾[Newsroom](#) ▾[Emergencies](#) ▾[Data](#) ▾[About WHO](#) ▾[Home](#) / [Campaigns](#) / [World No Tobacco Day](#) / [World No Tobacco Day 2022](#)

**POISONING  
OUR PLANET**

**#TobaccoExposed**

Throughout its lifecycle,  
tobacco pollutes the planet & damages  
the health of all people



**World No Tobacco Day 2022**







Créditos: **Priscila Iglesias**







Créditos: **Freepik**



# Índice de Poluição por Bitucas de Cigarro (CBPI)

- Geral: CBPI = *poluição severa* (CBPI > 10; 15,4 ± 11,5).

Citação: Castro, Ítalo Braga Castro; Ribeiro, Victor Vasques Ribeiro. Bitucas de cigarro descartadas: relações entre impactos ambientais, demografia e mercado em cidades brasileiras altamente urbanizadas. Rio de Janeiro: ACT Promoção da Saúde, 2023.

**Table 4.** Cigarette Butts Pollution Index (CBPI) scores, results and classification in Guarujá.

Site	DCBs	E	Soil status	Pathways	Annual rainfall	Groundwater distance	CBPI	Classification
S1	0.198	10	1.2	1.5	2.5	2	14.5±2.9	Severe pollution
	0.146	10	1.2	1.5	2.5	2		
	0.139	10	1.2	1.5	2.5	2		
S2	0.212	10	1.2	1.5	2.5	2	16.0±2.7	Severe pollution
	0.155	10	1.2	1.5	2.5	2		
	0.166	10	1.2	1.5	2.5	2		
S3	0.101	10	1.2	1.5	2.5	2	6.8±2.0	Significant pollution
	0.066	10	1.2	1.5	2.5	2		
	0.059	10	1.2	1.5	2.5	2		
S4	0.082	10	1.2	1.5	2.5	2	5.2±2.0	Significant pollution
	0.052	10	1.2	1.5	2.5	2		
	0.039	10	1.2	1.5	2.5	2		
S5	0.156	10	1.2	1.5	2.5	2	14.5±1.0	Severe pollution
	0.174	10	1.2	1.5	2.5	2		
	0.153	10	1.2	1.5	2.5	2		
S6	0.029	10	1.2	1.5	2.5	2	1.6±0.9	Low pollution
	0.01	10	1.2	1.5	2.5	2		
	0.015	10	1.2	1.5	2.5	2		
S7	0.452	10	1.2	1	2.5	2	33.6±7.0	Severe pollution
	0.685	10	1.2	1	2.5	2		
	0.545	10	1.2	1	2.5	2		
S8	0.206	10	1.2	2	2.5	2	18.5±5.4	Severe pollution
	0.121	10	1.2	2	2.5	2		
	0.136	10	1.2	2	2.5	2		
S9	0.562	10	1.2	1.5	2.5	2	27.6±19.9	Severe pollution
	0.190	10	1.2	1.5	2.5	2		
	0.169	10	1.2	1.5	2.5	2		



# Experimento de lixiviado

**Table 10.** Mean and standard deviation of concentrations of individual and total Polycyclic Aromatic Hydrocarbons (ng L<sup>-1</sup>) and chemical elements (µg L<sup>-1</sup>) measured in leachates of cigarette butts prepared in ultrapure water. <LD= below quantification limit, ND= not detected

Compound	Concentrations (ng.L <sup>-1</sup> )	Element	Concentrations (µg L <sup>-1</sup> )
Naphthalene	743.9 ± 84.1	As	5.4 ± 0.2
C1-Naphthalene	82.5 ± 6.5	Cd	ND
C2-Naphthalene	146.7 ± 15.6	Co	7.8 ± 0.1
Acenaphtylene	14.8 ± 2.9	Cr	ND
Acenaphtene	3.3 ± 0.6	Cu	0.8 ± 0.1
C3-Naphthalene	30.5 ± 4.4	Fe	39.8 ± 1.1
Fluorene	5.6 ± 1.0	Mg	ND
Phenanthrene	24.9 ± 3.5	Mn	0.2 ± 0.0
Anthracene	5.1 ± 0.4	Ni	0.2 ± 0.0
Fluoranthene	<LQ	Pb	0.1 ± 0.0
Pyrene	<LQ	Zn	2.3 ± 0.3
C1-Pyrene	3.7 ± 0.5		
Benz[a]anthracene	2.6 ± 0.6		
Chrysene	<LQ		
Benzo[b]fluoranthene	ND		
Benzo[k]fluoranthene	ND		
Benzo[e]pyrene	ND		
Benzo[a]pyrene	6.1 ± 0.5		
Perylene	ND		
Indeno[123cd]pyrene	ND		
Dibenz[ah]anthracene	<LQ		
Benzo[ghi]perylene	ND		

- ΣPAHs = 1,069.8 ng/L



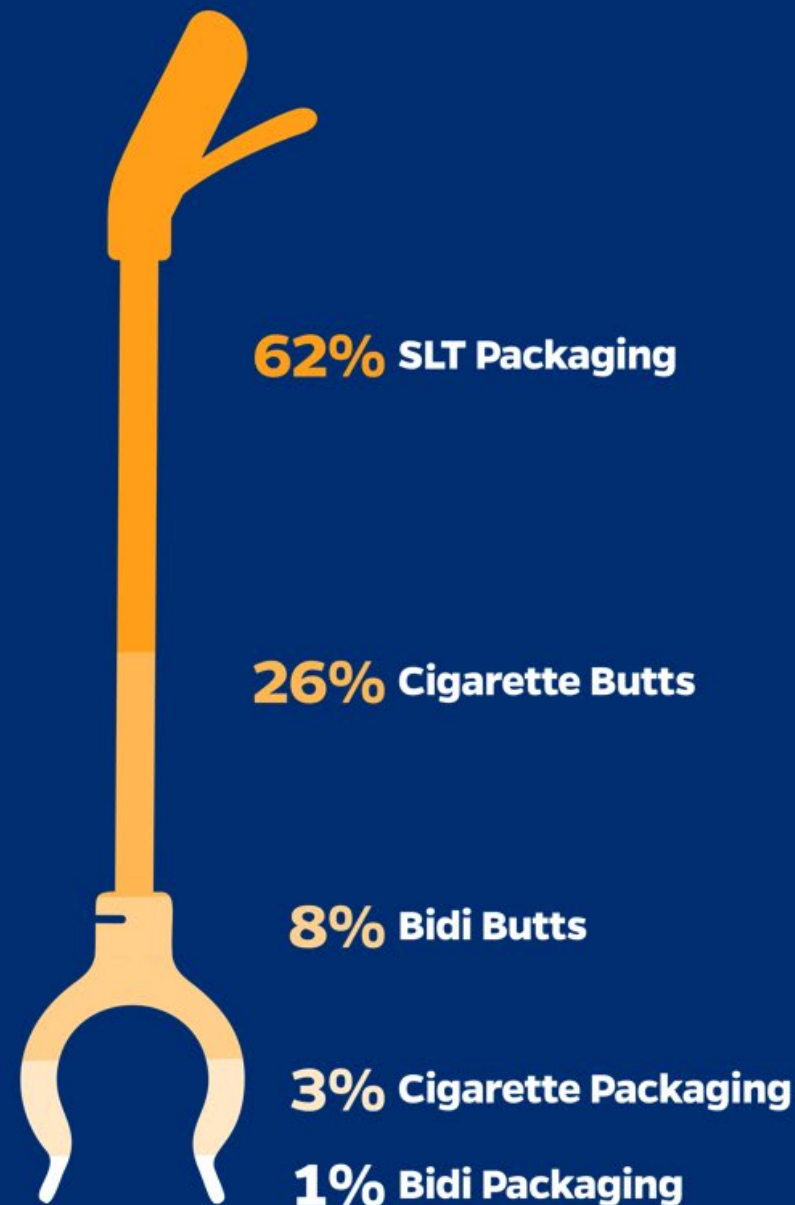








**Tobacco product waste**  
is **ubiquitous** in urban  
environments of India.  
**17,000+ pieces** of  
tobacco product litter  
were identified during  
this study:







# Resíduo de tabaco e marcas





# Identificação e legalidade da marca

- 81,5% (n=3,251) das bitucas tinham uma marca visível
- 26 marcas diferentes foram identificadas
- Rothmans (20.5%) > Marlboro (16.2%) > Gift (14.7%)
- Marcas ilícitas: 21,7%-36,6%





# Marketing pós-consumo

Short report



## Tobacco product litter as a form of postconsumption marketing: an observational study in India

Graziele Grilo ,<sup>1</sup> Bekir Kaplan ,<sup>1</sup> Joanna E Cohen ,<sup>1</sup> Paramita Bhattacharya ,<sup>2</sup> Nirmalya Mukherjee ,<sup>2</sup> Kevin Welding ,<sup>1</sup> Ryan David Kennedy <sup>1</sup>

<sup>1</sup>Institute for Global Tobacco Control, Department of Health, Behavior and Society, Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA  
<sup>2</sup>Centre for Public Health Research, Manbhumi Ananda Ashram Nityananda Trust (MANT), Kolkata, West Bengal, India

**Correspondence to**  
Graziele Grilo, Institute for Global Tobacco Control, Department of Health, Behavior and Society, Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA; [ggrilo@jhu.edu](mailto:ggrilo@jhu.edu)

Received 18 September 2023  
Accepted 26 December 2023

### ABSTRACT

**Background** Tobacco product litter may be a form of postconsumption marketing if the littered items are branded. We conducted an observational study in India to assess the presence of tobacco product litter and determine the proportion that included branding.

**Methods** During November–December 2022, we identified tobacco product litter (cigarette/bidi butts and packaging; smokeless tobacco packaging) in nine Indian cities: Bengaluru, Bhubaneswar, Chennai, Delhi, Guwahati, Hyderabad, Lucknow, Mumbai and Patna. In each city, we conducted observations along 15 different routes, each approximately 250 m in distance, for a total of 135 observational routes. Data collectors classified each piece of tobacco litter (product/packaging) and recorded if the litter had visible branding, such as brand names and/or logos.

**Results** The study identified 17 261 pieces of tobacco product litter; SLT packaging comprised the largest proportion of the sample (62%), followed by cigarette butts (26%), bidi butts (8%), cigarette packaging (3%) and bidi packaging (1%). Across the sample, 81% (n=13 924) of the litter was branded. A brand was visible

### WHAT IS ALREADY KNOWN ON THIS SUBJECT

- ⇒ Tobacco products are widely littered around the world, which negatively impacts the environment.
- ⇒ Tobacco products and their packaging are often branded with product names and logos.
- ⇒ Packaging is an important means to advertise tobacco products in preconsumption environments such as stores, and it has been suggested that littered products may further advertise products postconsumption.

### WHAT IMPORTANT GAPS IN KNOWLEDGE EXIST ON THIS TOPIC

- ⇒ Most published studies focus on litter from cigarettes in high-income countries and in settings such as beaches.
- ⇒ This study was conducted in urban environments in India and assessed litter of different tobacco products, and further quantified if that litter had branding (brand names and/or logos).







# Oportunidades de regulação

# Proibir uso de filtros

## Santa Cruz County's First-in-the-World Cigarette Filter Ban Passed

**SACRAMENTO, CALIFORNIA – OCTOBER 29, 2024** – Today, the Board of Supervisors of Santa Cruz County, California finalized its approval of a ban on the sale of filtered cigarettes and cigars. The sales ban will apply to all unincorporated areas of the county and requires that two of the four incorporated cities in the county pass similar ordinances before coming into effect.

**Cigarette filters are the world's leading source of trash and the leading source of plastic pollution.** Globally, approximately 4.5 trillion used filters – or butts – are discarded into the environment every year. Filters are non-biodegradable and cannot be feasibly collected or recycled.

"There are no downstream solutions to the plague of cigarette filters," said Laurent Huber, Executive Director of Action on Smoking and Health (ASH). "The only practical choice is to eliminate them from the market."

"In addition to adding microplastics to the environment, hazardous chemicals from tobacco smoke that are trapped in the filters leach into water and soil," said Dr. Georg E. Matt, co-director of the Center for Tobacco and the Environment at San Diego State University. **"Cigarette filters have no health benefits to smokers; they just make it easier to get people addicted and keep them addicted."**

Filters were added to cigarettes by the tobacco industry in the 1950s in response to growing health concerns about smoking. However, filters do nothing to mitigate the harms of smoking and may make things worse.

**"Filters are purely a marketing tool for the tobacco industry," Huber continued.** "They were designed to keep people from quitting smoking."

While Santa Cruz County is the first to pass such a law, there is movement in this direction across the globe. Environmental ministries in Belgium and the Netherlands have recommended banning filters, and over the past several years bills have been introduced in several U.S. states. Current negotiations at the United Nations on a treaty to end plastic pollution include text banning filters world-wide.

More than 98% of cigarettes are filtered, making smoking less harsh and keeping bits of tobacco out of the mouth. Public health officials hope that banning filters will motivate adults to quit smoking and greatly reduce youth uptake.

### ACTION ON SMOKING AND HEALTH

*Founded in 1967, Action on Smoking and Health (ASH) is America's oldest anti-tobacco organization, dedicated to a world with ZERO tobacco deaths. Because tobacco is the leading cause of preventable death worldwide, ASH supports bold solutions proportionate to the magnitude of the problem. [ash.org](https://ash.org)*





# Responsabilidade estendida do produtor



Créditos: Voz dos Oceanos



Créditos: Lucian José de Lacerda  
Interaminense



# Uniao Europeia



Créditos: Voz dos Oceanos

Through the EU's [Directive on single-use plastics](#), different measures are being applied to different products. These measures are proportionate and tailored to get the most effective results, and also take into account if more sustainable alternatives are available.

The 10 items being addressed by the Directive are

- Cotton bud sticks
- Cutlery, plates, straws and stirrers
- Balloons and sticks for balloons
- Food containers
- Cups for beverages
- Beverage containers
- Cigarette butts
- Plastic bags
- Packets and wrappers
- Wet wipes and sanitary items





# Litígio



**PUBLIC HEALTH  
LAW CENTER**  
at Mitchell Hamline School of Law

## **2/9/23 - BALTIMORE LEADS THE WAY: TAKING THE TOBACCO INDUSTRY TO COURT OVER TOXIC CIGARETTE BUTT WASTE**

Toxic cigarette filters, or “butts,” are the most littered plastic item. They contaminate streets, fields, beaches, and waterways in cities and towns throughout the United States and around the world. This has been the case for decades and no end is in sight, largely because of two widespread misconceptions: that cigarette filters are effective and that they are biodegradable. The tobacco industry has actively and tacitly encouraged both misconceptions, leading average consumers to believe that the cigarette butts they toss on the ground will decompose in the environment. Instead, cigarette filters are made of plastic fibers that break down into microplastics but do not decompose. Worse still, these discarded cigarette butts are laced with toxic chemicals and heavy metals, such as nicotine, cadmium, lead, and chromium.

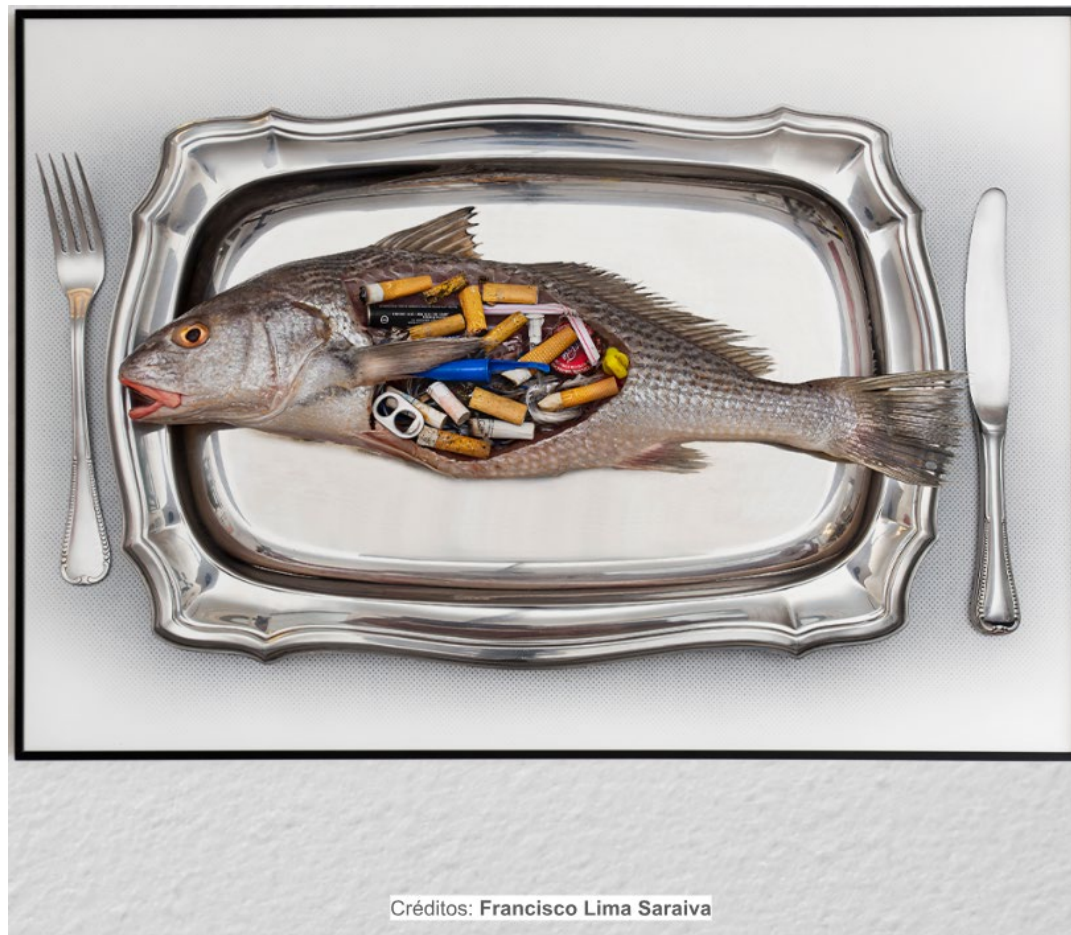
Prior efforts to address this toxic hazard have often focused on the consumer and have included raising the price of cigarettes to offset the cost of dealing with the disposal of these products. This approach does not address the primary source of the waste and has been met with tax-averse opposition. Maine and New York considered levying a refundable fee upon the return of the used cigarette, but neither state ultimately adopted this measure. In 2009, the City of San Francisco imposed a cigarette litter abatement fee to be paid by the consumer. In response, the tobacco industry dubbed it a tax and successfully pushed for a statewide measure to limit the authority of other localities in California to replicate this policy. Other efforts that focused on banning the sale of single use filtered cigarettes have failed. While the 2009 Tobacco Control Act (TCA) gives sole authority to the Federal Drug Administration to set tobacco product standards for the benefit of public health, the Act also preserves the power of states and localities to establish tobacco sales restrictions. So far, the FDA has not banned cigarette filters. Unfortunately, any locality or state that bans the sale of these products will face endless and costly resistance from a litigious industry. This can create a chilling effect on related local regulatory efforts.

### **A NEW APPROACH: LITIGATION**

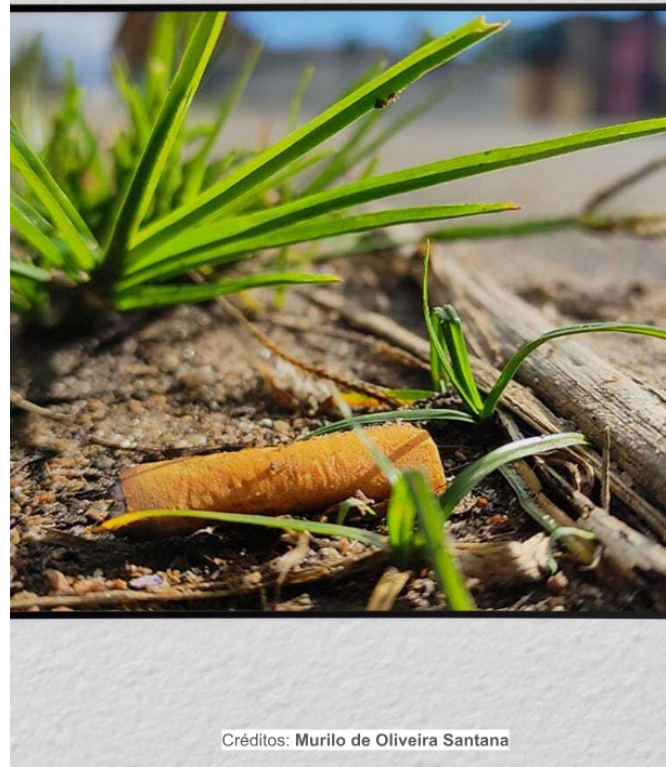




# Fundo Ambiental de Redução de Lixo de Cigarro (São Francisco, EUA)



# Ambientes exteriores livres de fumo



Créditos: Murilo de Oliveira Santana





# Embalagens







Obrigada!  
[ggrilo@jhu.edu](mailto:ggrilo@jhu.edu)

<https://actbr.org.br/uploads/arquivos/Bitucas-de-cigarro-descartadas-relacoes-entre-impactos-ambientais%2C-demografia-e-mercado-em-cidades-brasileiras-altamente-urbanizadas%282%29.pdf>

<https://www.globaltobaccocontrol.org/en/resources/tobacco-product-litter-post-consumption-marketing>