
# Why smokefree outdoor settings?

María José López
Public Health Agency of Barcelona, CIBERESP, IR Sant Pau

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# Why are we concerned about smoking in outdoor spaces?

1. Low levels of SHS?
2. Against denormalization of smoking
3. The current partial laws do not work
4. Significant environmental impact
5. Contributes to health inequalities

# 1. Low levels?

# 1. Low levels?

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## Secondhand smoke exposure assessment in outdoor hospitality venues across 11 European countries

Elisabet Henderson [a,b,c], Xavier Continente [a,c,d], Esteve Fernández [e,f,g,h], Olena Tigova [e,f,g,h], Nuria Cortés-Francisco [a,d], Silvano Gallus [i], Alessandra Lugo [i], Sean Semple [j], Ruaraidh Dobson [j], Luke Clancy [k], Sheila Keogan [k], Ario Ruprecht [l], Alessandro Borgini [l], Anna Tzortzi [m], Vergina K. Vyzikidou [m], Giuseppe Gorini [n], Angel López-Nicolás [o], Joan B. Soriano [h,p,q,r], Gergana Geshanova [s], Joseph Osman [t], Ute Mons [u,v], Krzysztof Przewozniak [w,x,y], José Precioso [z], Ramona Brad [aa], Maria J. López [a,b,c,d,*], the TackSHS project Investigators[1]

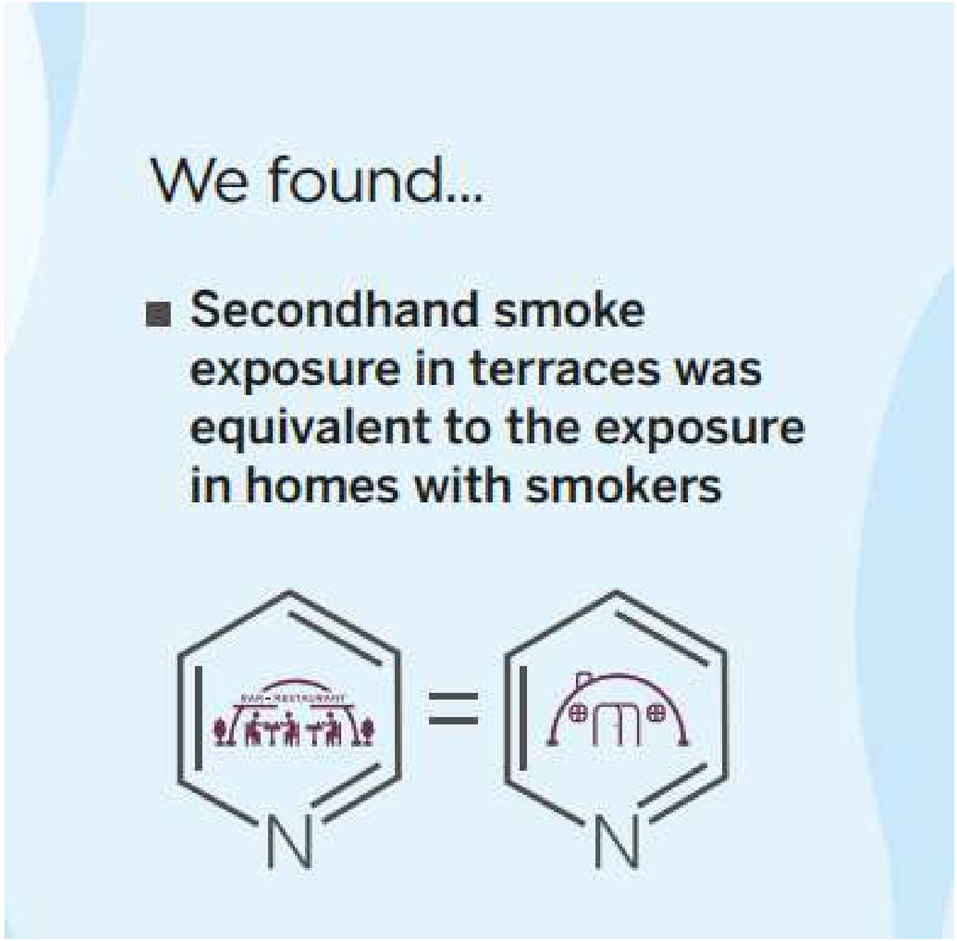

Terraces in hospitality venues

# 1. Low levels?

- Assess SHS exposure levels in urban outdoor settings from 11 European countries
- Measuring airborne nicotine and tobacco-related signs

TackSHS

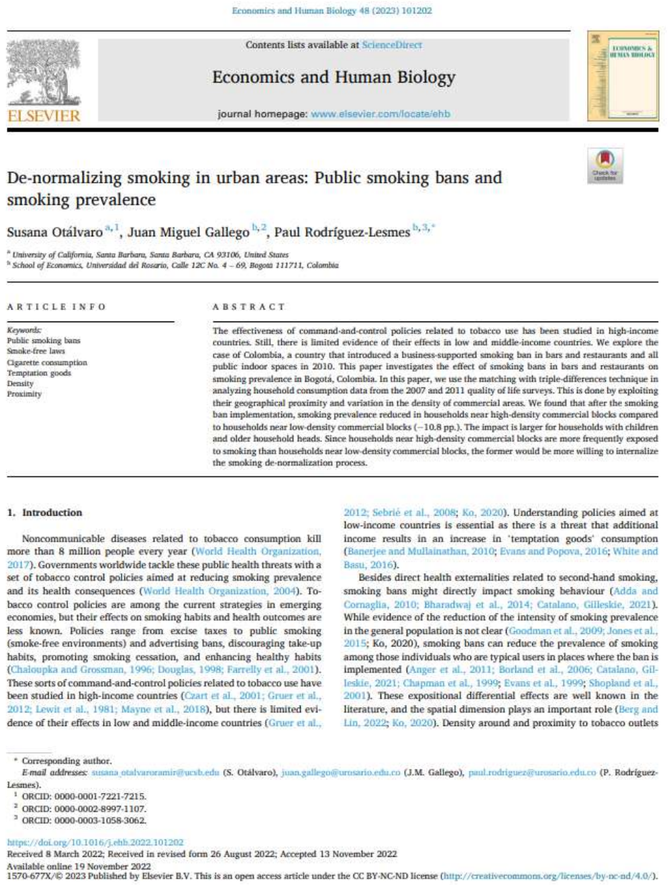
# 1. Low levels?




**Also important:**
**This exposure is an occupational exposure for hospitality workers**

# 2. Against denormalization

*We found that the public smoking ban in Colombia resulted in a significant reduction in smoking prevalence (−10.8 pp.) among households that were previously more exposed to the social norm by living close to highly dense commercial areas in the city.*



Economics and Human Biology 48 (2023) 101202

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Economics and Human Biology

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De-normalizing smoking in urban areas: Public smoking bans and smoking prevalence

Susana Otálvaro [a,1], Juan Miguel Gallego [b,2], Paul Rodríguez-Lesmes [b,3,*]

[a] University of California, Santa Barbara, Santa Barbara, CA 93106, United States
[b] School of Economics, Universidad del Rosario, Calle 12C No. 4 – 69, Bogotá 111711, Colombia

ARTICLE INFO

*Keywords:*
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Smoke-free laws
Cigarette consumption
Temptation goods
Density
Proximity

ABSTRACT

The effectiveness of command-and-control policies related to tobacco use has been studied in high-income countries. Still, there is limited evidence of their effects in low and middle-income countries. We explore the case of Colombia, a country that introduced a business-supported smoking ban in bars and restaurants and all public indoor spaces in 2010. This paper investigates the effect of smoking bans in bars and restaurants on smoking prevalence in Bogotá, Colombia. In this paper, we use the matching with triple-differences technique in analyzing household consumption data from the 2007 and 2011 quality of life surveys. This is done by exploiting their geographical proximity and variation in the density of commercial areas. We found that after the smoking ban implementation, smoking prevalence reduced in households near high-density commercial blocks compared to households near low-density commercial blocks (−10.8 pp.). The impact is larger for households with children and older household heads. Since households near high-density commercial blocks are more frequently exposed to smoking than households near low-density commercial blocks, the former would be more willing to internalize the smoking de-normalization process.

## 1. Introduction

Noncommunicable diseases related to tobacco consumption kill more than 8 million people every year (World Health Organization, 2017). Governments worldwide tackle these public health threats with a set of tobacco control policies aimed at reducing smoking prevalence and its health consequences (World Health Organization, 2004). Tobacco control policies are among the current strategies in emerging economies, but their effects on smoking habits and health outcomes are less known. Policies range from excise taxes to public smoking (smoke-free environments) and advertising bans, discouraging take-up habits, promoting smoking cessation, and enhancing healthy habits (Chaloupka and Grossman, 1996; Douglas, 1998; Farrelly et al., 2001). These sorts of command-and-control policies related to tobacco use have been studied in high-income countries (Czart et al., 2001; Gruer et al., 2012; Lewit et al., 1981; Mayne et al., 2018), but there is limited evidence of their effects in low and middle-income countries (Gruer et al., 2012; Sebrié et al., 2008; Ko, 2020). Understanding policies aimed at low-income countries is essential as there is a threat that additional income results in an increase in 'temptation goods' consumption (Banerjee and Mullainathan, 2010; Evans and Popova, 2016; White and Basu, 2016).

Besides direct health externalities related to second-hand smoking, smoking bans might directly impact smoking behaviour (Adda and Cornaglia, 2010; Bharadwaj et al., 2014; Catalano, Gilleskie, 2021). While evidence of the reduction of the intensity of smoking prevalence in the general population is not clear (Goodman et al., 2009; Jones et al., 2015; Ko, 2020), smoking bans can reduce the prevalence of smoking among those individuals who are typical users in places where the ban is implemented (Anger et al., 2011; Borland et al., 2006; Catalano, Gilleskie, 2021; Chapman et al., 1999; Evans et al., 1999; Shopland et al., 2001). These expositional differential effects are well known in the literature, and the spatial dimension plays an important role (Berg and Lin, 2022; Ko, 2020). Density around and proximity to tobacco outlets

* Corresponding author.
*E-mail addresses:* susana_otalvaroramir@ucsb.edu (S. Otálvaro), juan.gallego@urosario.edu.co (J.M. Gallego), paul.rodriguez@urosario.edu.co (P. Rodríguez-Lesmes).
[1] ORCID: 0000-0001-7221-7215.
[2] ORCID: 0000-0002-8997-1107.
[3] ORCID: 0000-0003-1058-3062.

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# 3. The current partial laws do not work

# 3. The current partial laws do not work

## Spanish smoking control law:

*Smoking is allowed on hospitality terraces if it is an uncovered space or covered with up to two side walls, and the enclosed area does not exceed 50% of the terrace*

Gaceta Sanitaria 38 (2024) 102422

Original breve

¿Se cumple la ley de control del tabaquismo en las terrazas de hostelería?

M. José López[a,b,c,d,*], Marcela Fu[e,f,g,h], Esteve Fernández[e,f,g,h], Elisabet Henderson[a,c] y Xavier Continente[a,b,c]

[a] Agència de Salut Pública de Barcelona, Barcelona, España
[b] CIBER de Epidemiología y Salud Pública (CIBERESP), España
[c] Institut de Recerca Sant Pau (IR Sant Pau), Barcelona, España
[d] Departament de Ciències Experimentals i de la Salut, Universitat Pompeu Fabra, Barcelona, España
[e] Institut Català d'Oncologia - Centro Colaborador de la OMS para el Control del Tabaco, L'Hospitalet de Llobregat (Barcelona), España
[f] Institut d'Investigació Biomèdica de Bellvitge, L'Hospitalet de Llobregat (Barcelona), España
[g] Facultad de Medicina y Ciencias de la Salud, Universitat de Barcelona, L'Hospitalet de Llobregat (Barcelona), España
[h] CIBER de Enfermedades Respiratorias (CIBERES), España

INFORMACIÓN DEL ARTÍCULO

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*Palabras clave:*
Humo ambiental de tabaco
Terrazas
Hostelería
Normativa
Cumplimiento

RESUMEN

*Objetivo:* Describir el consumo de tabaco y el cumplimiento de la normativa en las terrazas de hostelería de Barcelona.
*Método:* Estudio transversal en una muestra de 120 terrazas de hostelería de Barcelona. Se realizaron observaciones de 30 minutos mediante una ficha de registro estandarizada. Las variables de estudio fueron personas fumando, número de cigarrillos fumados, presencia de colillas, nivel socioeconómico del barrio, momento de la observación, normativa de consumo, número de sillas y número de personas.
*Resultados:* En el 97,5% de las terrazas había personas fumando en el momento de la observación, sin diferencias según el nivel socioeconómico del barrio o la normativa de consumo de tabaco en la terraza. La ley se incumplía en el 100% de las terrazas en las que estaba prohibido fumar.
*Conclusiones:* El incumplimiento generalizado de la actual ley pone de manifiesto la necesidad de implementar la prohibición de fumar sin excepciones en las terrazas de hostelería.


**How is the compliance with the tobacco control law in hospitaty terraces?**

*Keywords:*
Secondhand smoke
Terraces
Hospitality
Regulation
Compliance

ABSTRACT

*Objective:* To describe tobacco consumption and the compliance with the law on hospitality terraces in Barcelona.
*Method:* Cross-sectional study by observation in a sample of 120 hospitality terraces in Barcelona. 30-minute observations were made using a standardized record sheet. The study variables were number of people smoking, number of cigarettes smoked, cigarette butts, socioeconomic status of the neighborhood, time of observation, consumption regulation, number of chairs and number of persons.
*Results:* There were people smoking at the time of the observation in 97.5% of the terraces, with no differences according to socioeconomic level of the neighborhood or the regulation of the terrace. There was no compliance with the law in 100% of the terraces where smoking was banned.
*Conclusions:* The widespread non-compliance with the current law indicates the need to implement a smoking ban without exceptions on hospitality terraces.


**Introducción**

La exposición al humo ambiental de tabaco (HAT) se asocia causalmente con diversos problemas de salud, siendo su carga de morbimortalidad muy elevada. En 2020, en España se atribuyeron 729 muertes a la exposición al HAT en población ≥ 35 años[1]. Asimismo, en población infantil se atribuirían 136.000 casos incidentes y 3000 ingresos hospitalarios anuales por trastornos respiratorios[2].

A pesar del avance que supusieron las Leyes 28/2005 y 42/2010 de medidas sanitarias frente al tabaquismo, se permite fumar en terrazas de hostelería siempre que el aire circule libremente (espacio no cubierto o cubierto con hasta dos paramentos laterales) y la superficie cerrada no supere el 50% de la terraza. Un estudio realizado en 2018 en 12 países europeos[3] mostró que las terrazas de hostelería eran uno de los espacios con mayor prevalencia de exposición autodeclarada al HAT (71,4%), prevalencia que es aún mayor

* Autora para correspondencia.
*Correo electrónico:* mjlopez@aspb.cat (M.J. López).

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https://www.gacetasanitaria.org/es-pdf-S0213911124000748

# 3. The current partial laws do not work

120 hospitality terraces

44 terraces with smoking bans

X% incompliance??

# 3. The current partial laws do not work

Same results in the TackSHS project!
(2018 in diferent countries)

# 4. Environmental Impact

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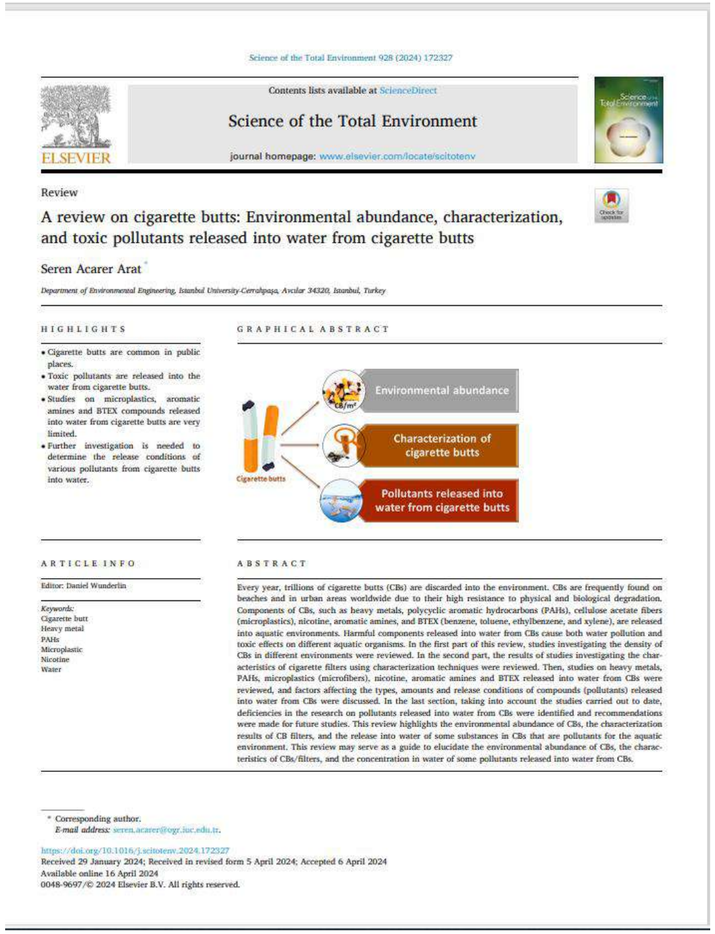
Every year, trillions of cigarette butts (CBs) are discarded into the environment

High resistance to physical and biological degradation

Harmful components released into water from CBs cause both water pollution and toxic effects on different aquatic organisms



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Review

A review on cigarette butts: Environmental abundance, characterization, and toxic pollutants released into water from cigarette butts

Seren Acarer Arat *

*Department of Environmental Engineering, Istanbul University-Cerrahpaşa, Avcılar 34320, Istanbul, Turkey*

HIGHLIGHTS

- Cigarette butts are common in public places.
- Toxic pollutants are released into the water from cigarette butts.
- Studies on microplastics, aromatic amines and BTEX compounds released into water from cigarette butts are very limited.
- Further investigation is needed to determine the release conditions of various pollutants from cigarette butts into water.

GRAPHICAL ABSTRACT



ARTICLE INFO

Editor: Daniel Wunderlin

*Keywords:*
Cigarette butt
Heavy metal
PAHs
Microplastic
Nicotine
Water

ABSTRACT

Every year, trillions of cigarette butts (CBs) are discarded into the environment. CBs are frequently found on beaches and in urban areas worldwide due to their high resistance to physical and biological degradation. Components of CBs, such as heavy metals, polycyclic aromatic hydrocarbons (PAHs), cellulose acetate fibers (microplastics), nicotine, aromatic amines, and BTEX (benzene, toluene, ethylbenzene, and xylene), are released into aquatic environments. Harmful components released into water from CBs cause both water pollution and toxic effects on different aquatic organisms. In the first part of this review, studies investigating the density of CBs in different environments were reviewed. In the second part, the results of studies investigating the characteristics of cigarette filters using characterization techniques were reviewed. Then, studies on heavy metals, PAHs, microplastics (microfibers), nicotine, aromatic amines and BTEX released into water from CBs were reviewed, and factors affecting the types, amounts and release conditions of compounds (pollutants) released into water from CBs were discussed. In the last section, taking into account the studies carried out to date, deficiencies in the research on pollutants released into water from CBs were identified and recommendations were made for future studies. This review highlights the environmental abundance of CBs, the characterization results of CB filters, and the release into water of some substances in CBs that are pollutants for the aquatic environment. This review may serve as a guide to elucidate the environmental abundance of CBs, the characteristics of CBs/filters, and the concentration in water of some pollutants released into water from CBs.

* Corresponding author.
*E-mail address:* seren.acarer@ogr.iuc.edu.tr.

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# 5. Contributes to health inequalities

# CHILDREN'S PLAYGROUNDS

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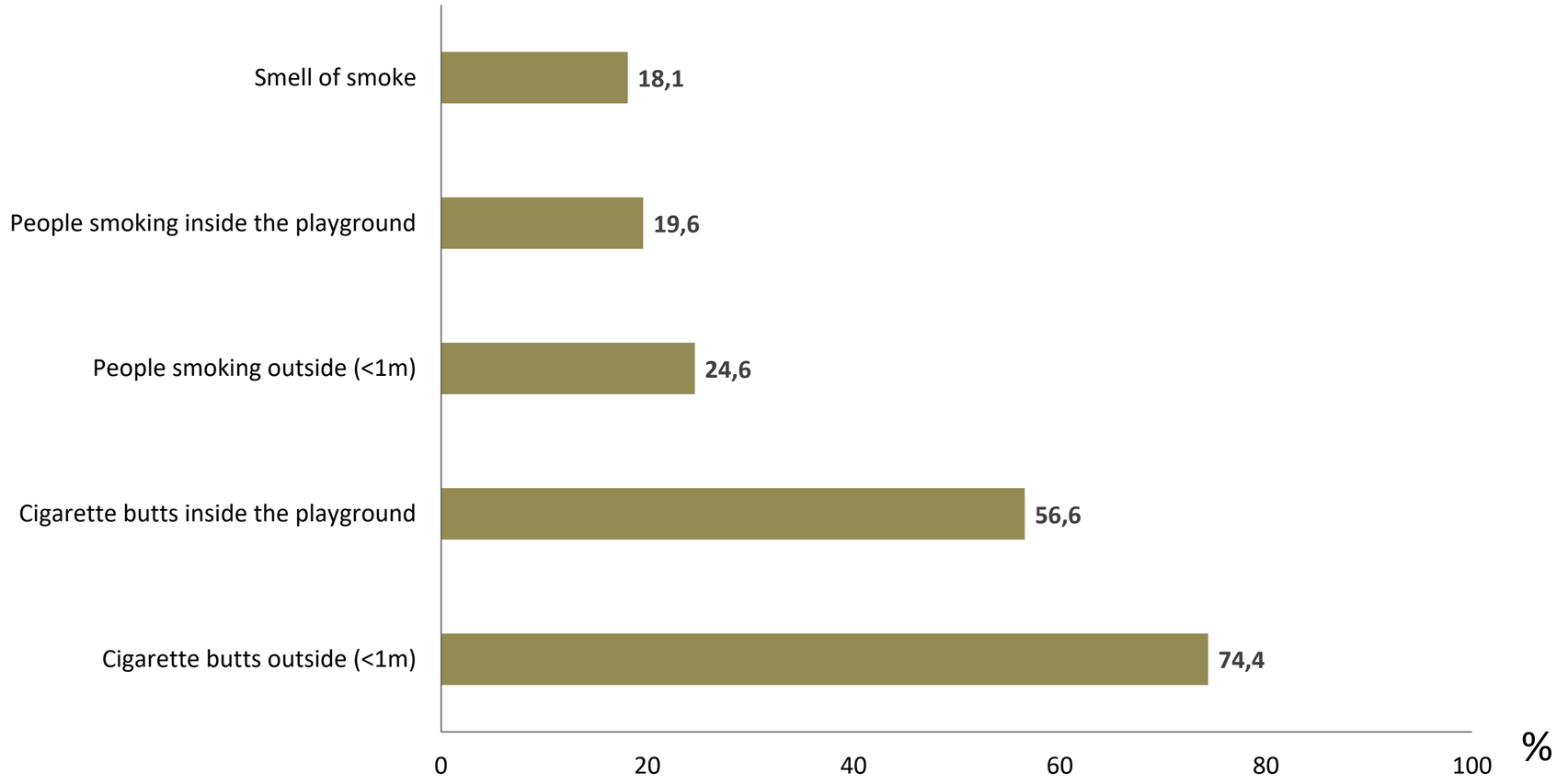
Environment International

journal homepage: www.elsevier.com/locate/envint

## Secondhand smoke exposure in outdoor children's playgrounds in 11 European countries

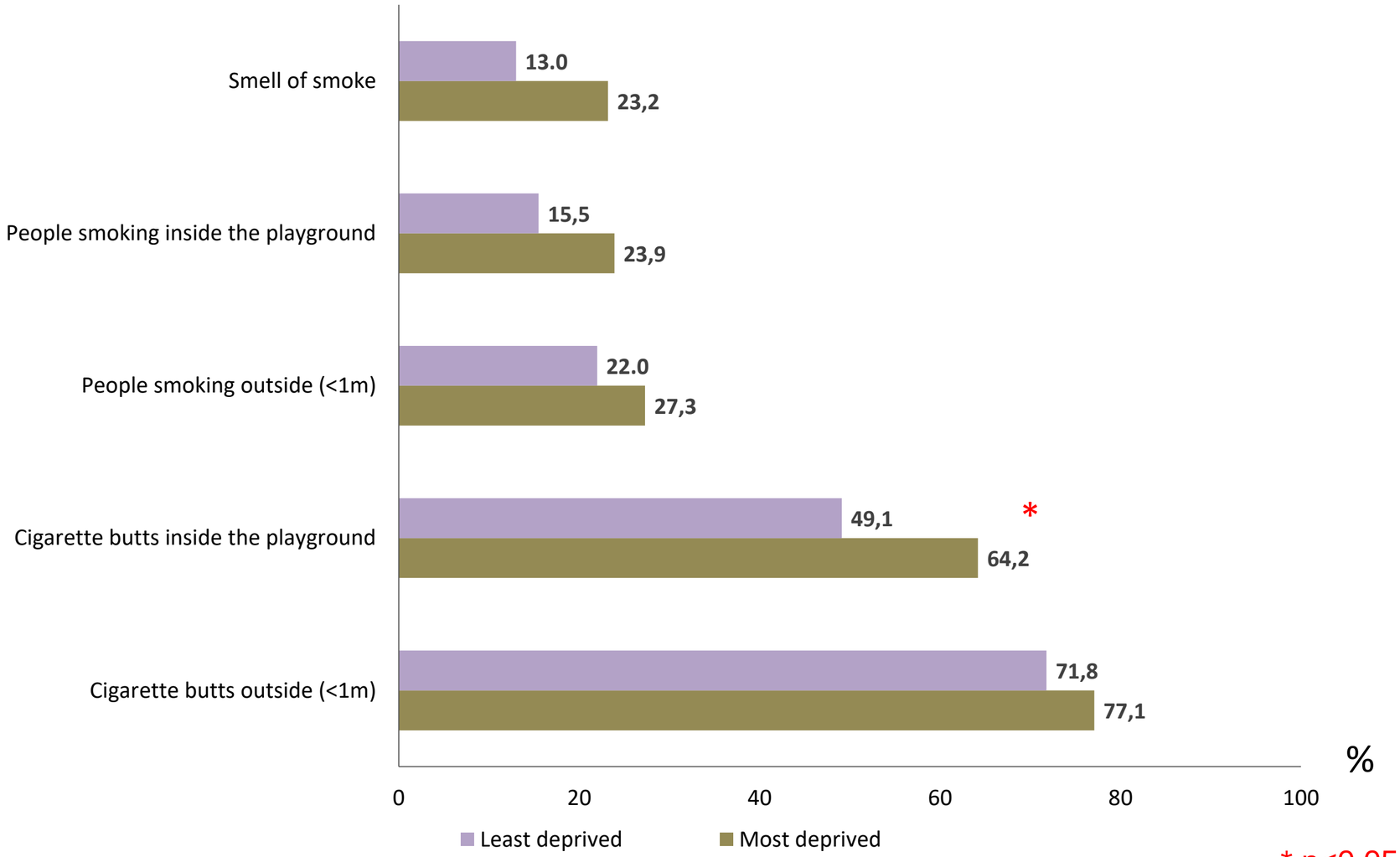
Elisabet Henderson [a,b,c], Xavier Continente [a,c,d], Esteve Fernández [e,f,g,h], Olena Tigova [e,f,g,h], Nuria Cortés-Francisco [a], Silvano Gallus [i], Alessandra Lugo [i], Sean Semple [j], Rachel O'Donnell [j], Luke Clancy [k], Sheila Keogan [k], Ario Ruprecht [l], Alessandro Borgini [l], Anna Tzortzi [m], Vergina K Vyzikidou [m], Giuseppe Gorini [n], Angel López-Nicolás [o], Joan B Soriano [h,p], Gergana Geshanova [q], Joseph Osman [r], Ute Mons [s], Krzysztof Przewozniak [t,u], José Precioso [v], Ramona Brad [w], Maria J. López [a,b,c,d,*], the TackSHS project investigators

# Tobacco signs in playgrounds (n=219)




Henderson E, et al., 2021. Environ Int. https://doi.org/10.1016/j.envint.2020.105775

# Tobacco signs in playgrounds, according to neighborhood's SES




* p<0.05

Henderson E, et al., 2021. *Environ Int*. https://doi.org/10.1016/j.envint.2020.105775

# PRIMARY SCHOOLS ENTRANCES

Science of the Total Environment 743 (2020) 140743

Contents lists available at ScienceDirect

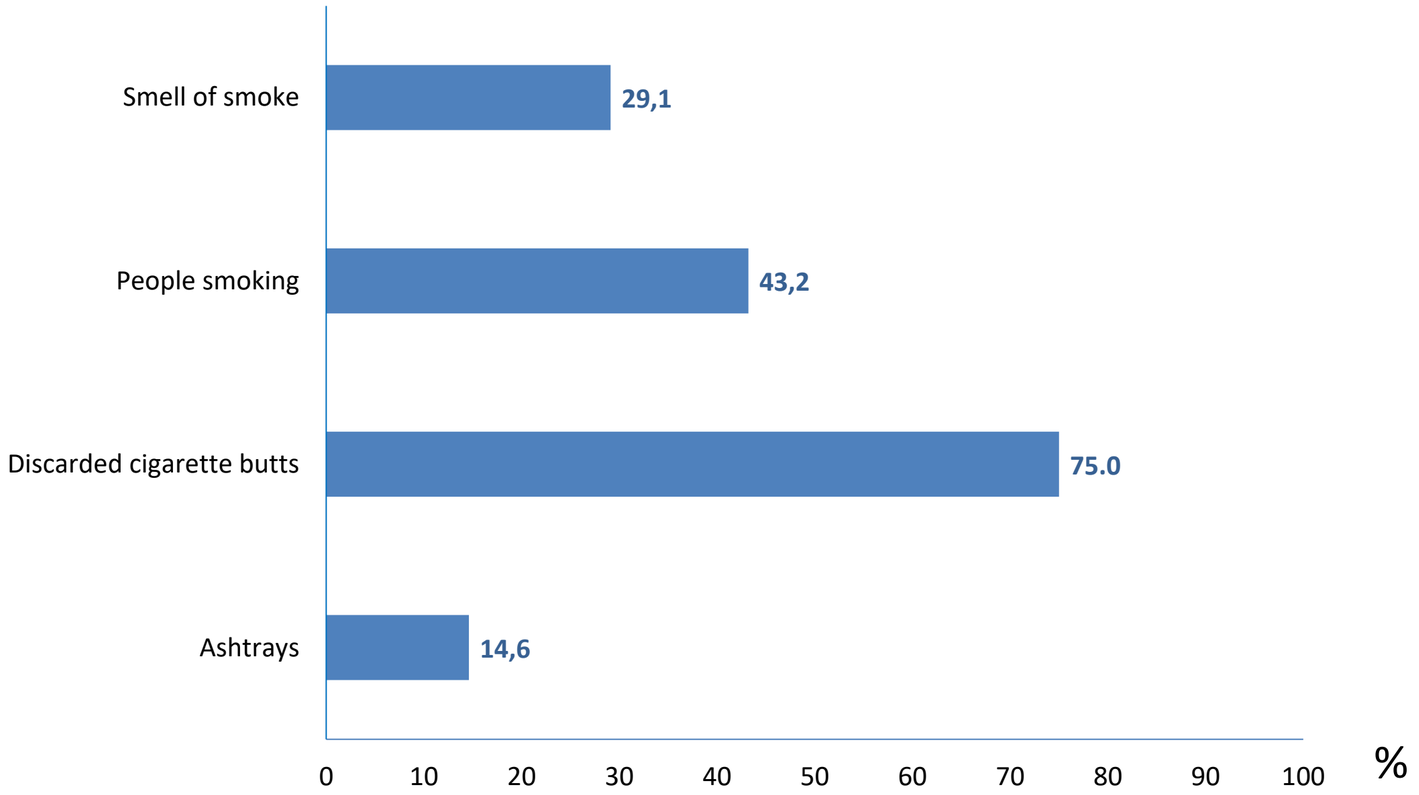
Science of the Total Environment

journal homepage: www.elsevier.com/locate/scitotenv

## Secondhand smoke exposure and other signs of tobacco consumption at outdoor entrances of primary schools in 11 European countries

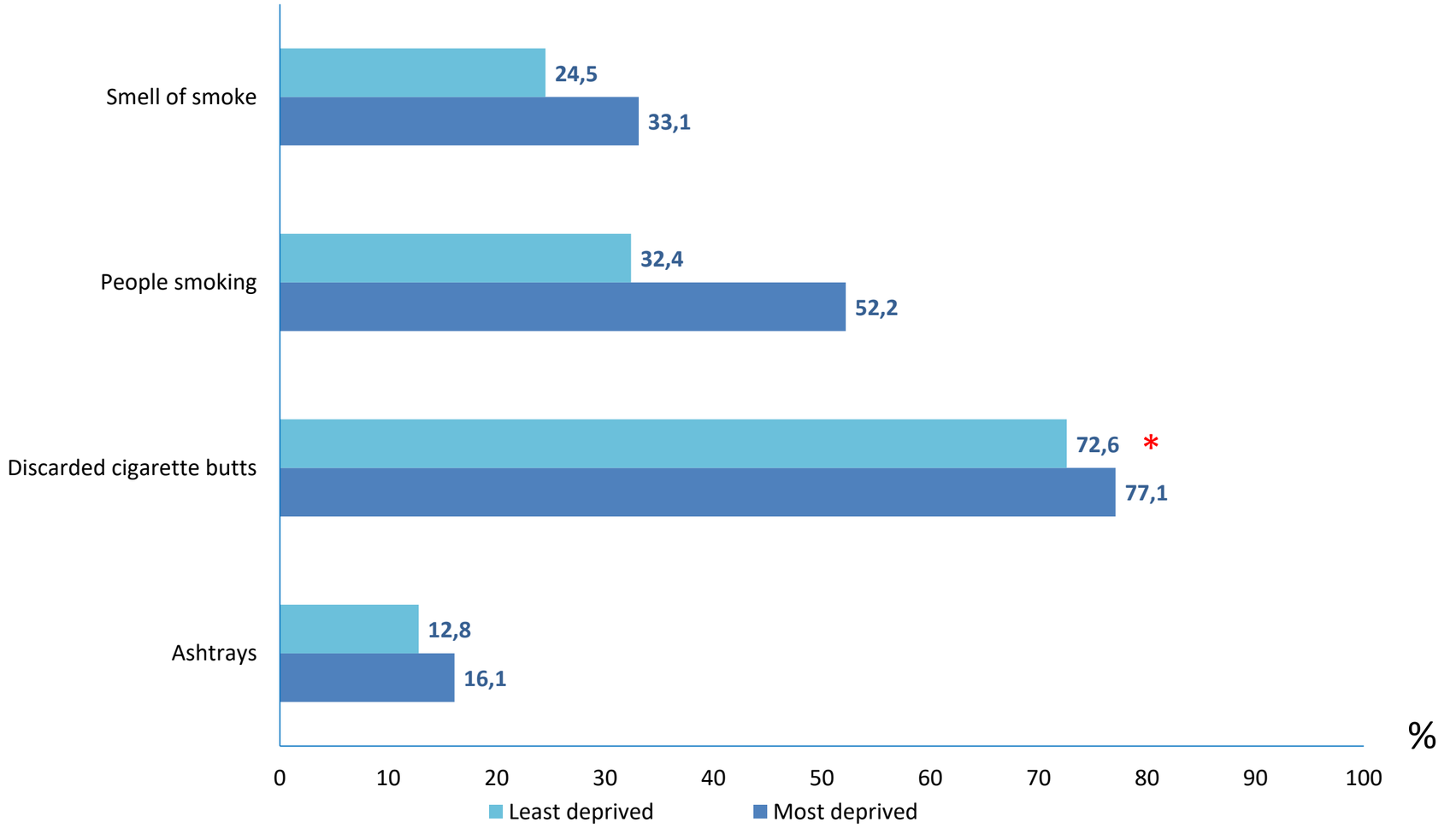
Elisabet Henderson [a,b,c], Xavier Continente [a,c,d], Esteve Fernández [e,f,g,h], Olena Tigova [e,f,g,h], Nuria Cortés-Francisco [a,d], Silvano Gallus [i], Alessandra Lugo [i], Sean Semple [j], Rachel O'Donnell [j], Luke Clancy, Sheila Keogan [k], Ario Ruprecht [l], Alessandro Borgini [l], Anna Tzortzi [m], Vergina K. Vyzikidou [m], Giuseppe Gori, Angel López-Nicolás [o], Joan B. Soriano [h,p], Gergana Geshanova [q], Joseph Osman [r], Ute Mons [s], Krzysztof Przewozniak [t,u,v], José Precioso [w], Ramona Brad [x], Maria J. López [a,b,c,d,*], and the TackSHS project Investigators

# Tobacco signs in school entrances (n=220)




Henderson E, et al., 2020. *Sci Total Environ.* https://doi.org/10.1016/j.scitotenv.2020.140743

# Tobacco signs in schools, according to neighborhood's SES




* p<0,05

Henderson E, et al., 2020. *Sci Total Environ.* https://doi.org/10.1016/j.scitotenv.2020.140743

# Why are we concerned about smoking in outdoor spaces?

1. Low levels of SHS?
2. Against denormalization of smoking
3. The current partial laws do not work
4. Significant environmental impact
5. Contributes to health inequalities

# Moving towards smoke-free outdoor areas…

- In outdoor environments where smoking is regulated:
  - ✓ Total bans, not parcial
  - ✓ Establish perimeters
  - ✓ Clear signposting
  - ✓ Promotion (equity perspective!), monitoring and enforcement efforts

- Advance in implementing more smoke-free outdoor areas (regulation!)

- Smoke- AND AEROSOL- free environments!


# Thank you!

Salut/ ICO Institut Català d'Oncologia

Centre Col·laborador de l'OMS per al Control del Tabac

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Institut d'Investigació Biomèdica de Bellvitge

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ENSP
European Network for Smoking and Tobacco Prevention

Smoke Free PARTNERSHIP

Universitat de Barcelona

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