

Emerging nicotine products, tobacco control and their impact on child health

Dr Filippos Filippidis

Chair of the Tobacco Control Committee of the European Respiratory Society (ERS)

Reader in Public Health, Imperial College London



International Network of Health Promoting Hospitals & Health Services



Outline

- Impact of tobacco on children
- Benefits of tobacco control for children
- Overview of the ERS Tobacco Control Committee
- ERS statement on emerging products

Exposure to the harms of tobacco



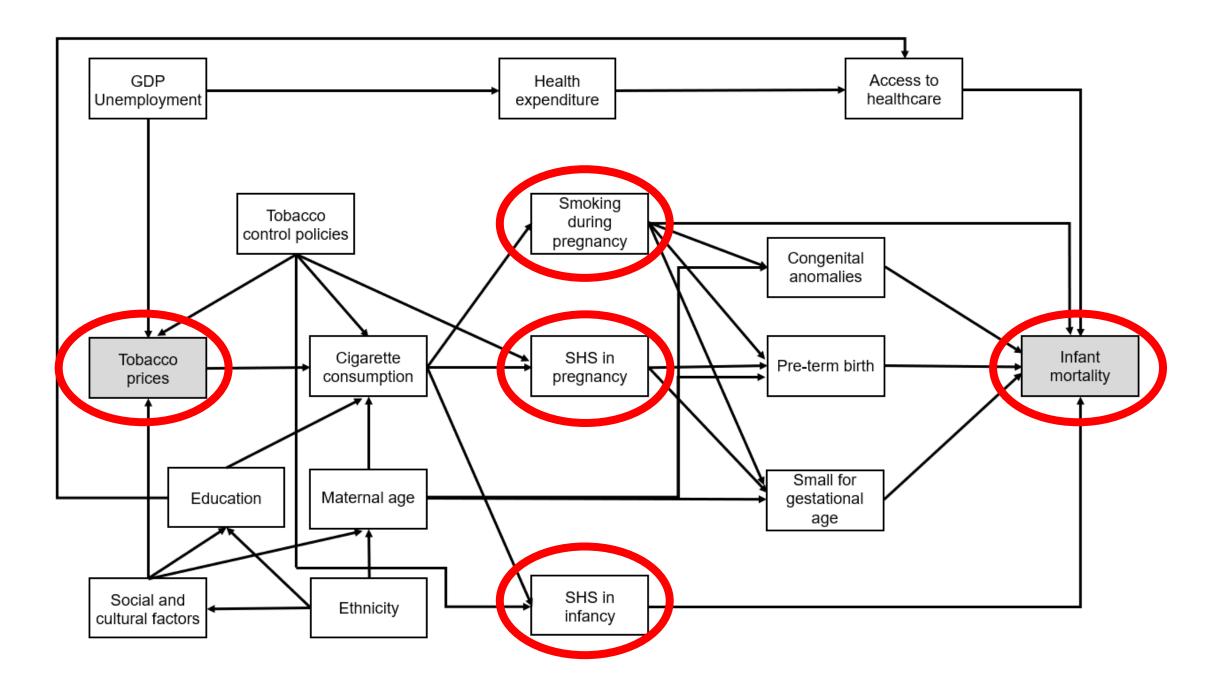
Maternal smoking during pregnancy

Exposure of pregnant women and children to secondhand smoke





Smoking in childhood



Relative risks of secondhand smoke exposure

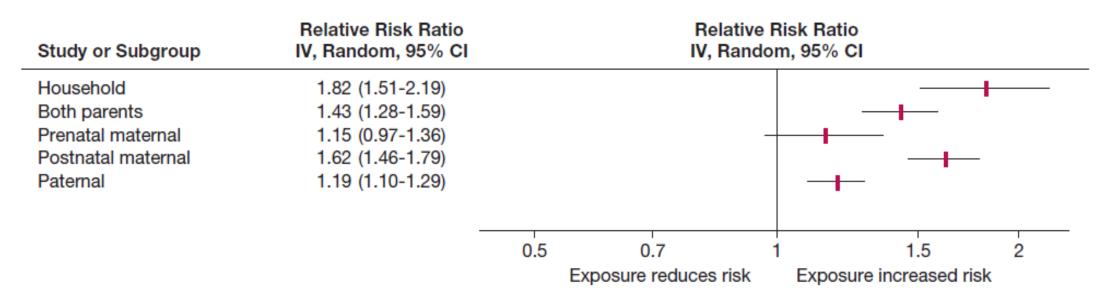
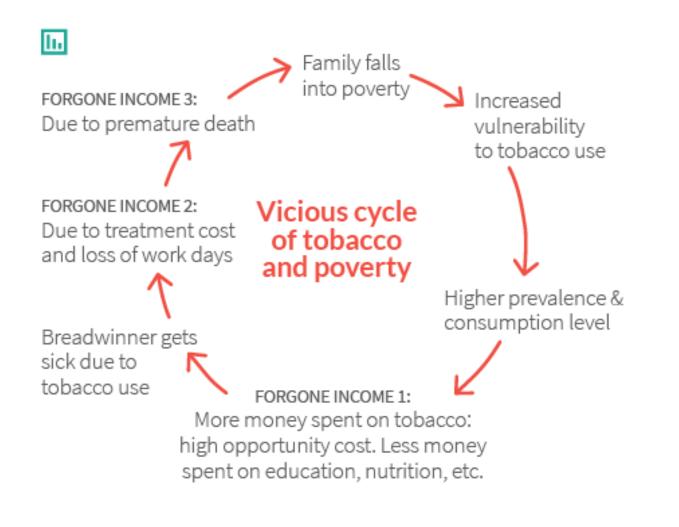


Figure 2 – Summary estimates from meta-analyses assessing the effect of passive smoking on the risk of lower respiratory tract infection in infants.

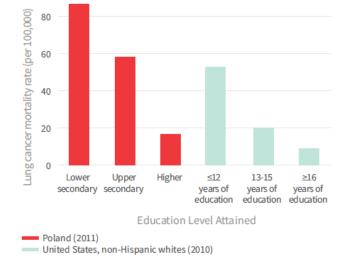
Jayes et al, ERJ 2016

Smoking and inequalities



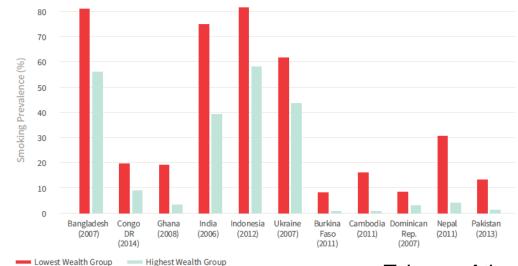
Disparity in Tobacco Deaths

The burden of lung cancer deaths falls heaviest upon the least-educated



Disparities in Smoking Prevalence

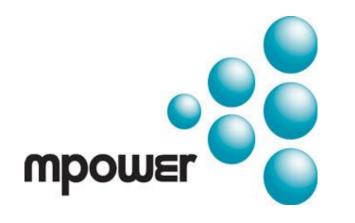
In both men and women, differences in smoking prevalence can contribute to overall health and economic disparities



Tobacco Atlas



WHO's MPOWER package



- Monitor tobacco use and prevention policies
- Protect people from tobacco smoke
- Offer help to quit tobacco use
- Warn about the dangers of tobacco
- Enforce bans on tobacco advertising, promotion and sponsorship
- Raise taxes on tobacco

Effect of tobacco control policies on perinatal and child health: a systematic review and meta-analysis

Timor Faber, Arun Kumar, Johan P Mackenbach, Christopher Millett, Sanjay Basu, Aziz Sheikh, Jasper V Been

Summary

Background Tobacco smoking and smoke exposure during pregnancy and childhood cause considerable childhood morbidity and mortality. We did a systematic review and meta-analysis to investigate whether implementation of WHO's recommended tobacco control policies (MPOWER) was of benefit to perinatal and child health.

A Preterm birth

	Direct risk change (95% Cl)	Weight (%)	Risk of bias
Bakolis (2016) ³⁰	-3·73 (-7·00 to -0·46)	13.86	Low
Bharadwaj (2014) ³⁴	-39.06 (-81.94 to 3.81)	0.36	Moderate
Cox (2013) ³⁷	-3·18 (-5·40 to -0·96)	15.73	Low
Hajdu (2017) ⁴⁴	-25·00 (-55·95 to 5·95)	0.68	Low
Hawkins (2014) ⁴⁶	7·50 (–1·15 to 16·15)	6.00	Low
Mackay (2012) ⁵²	-11·72 (-15·98 to -7·46)	12.04	Low
McKinnon (2015) ⁵⁴	–5·00 (–10·00 to –0·00)	10.73	Moderate
Peelen (2016) ⁵⁸ +	0·94 (-1·89 to 3·77)	14.68	Low
Simón (2017) ⁶²	-4·50 (-6·10 to -2·90)	16.65	Moderate
Vicedo-Cabrera (2016) ⁶³	-3·56 (-9·47 to 2·35)	9·27	Low
Overall (I ² =75·2%, p=0·000)	-3·77 (-6·37 to -1·16)	100.00	
-100 -50 0 50	100		
Direct risk change (%)			

CrossMa

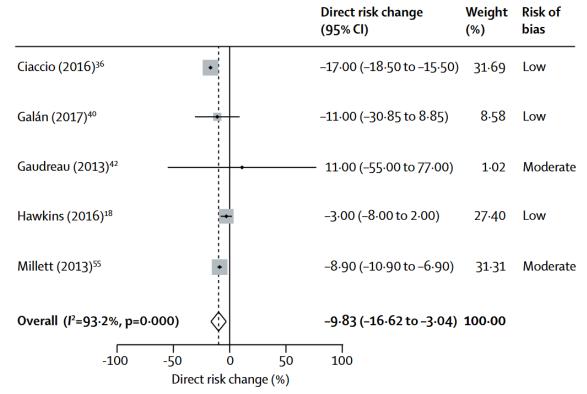


Lancet Public Health 2017;

2:420-37

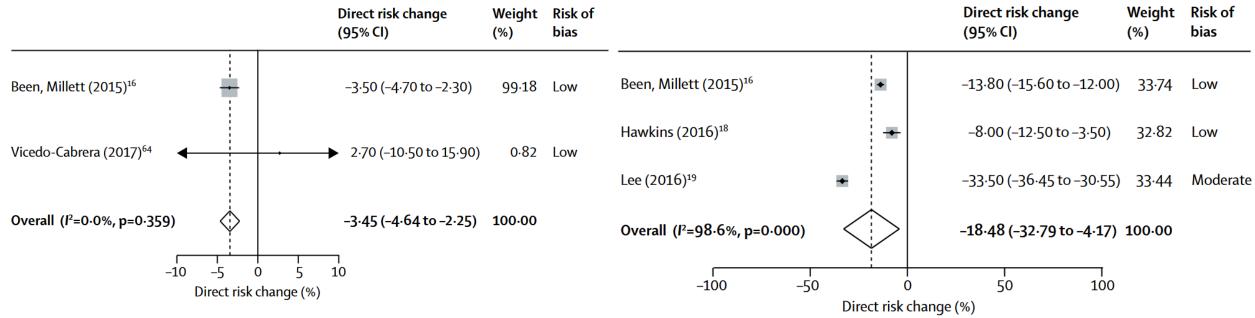
See Comment page e392

B Asthma exacerbations requiring hospital attendance

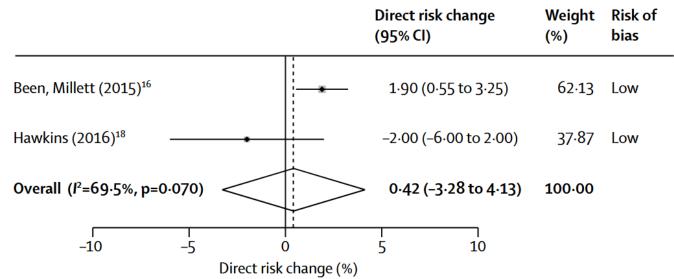


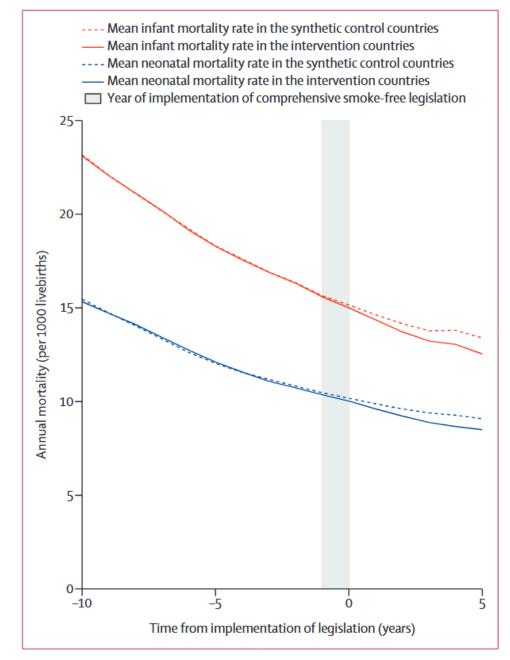
C Respiratory tract infections requiring hospital attendance

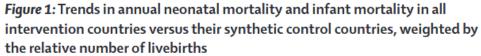
D Lower respiratory tract infections requiring hospital attendance



E Upper respiratory tract infections requiring hospital attendance







Rado et al, Lancet Public Health, 2022

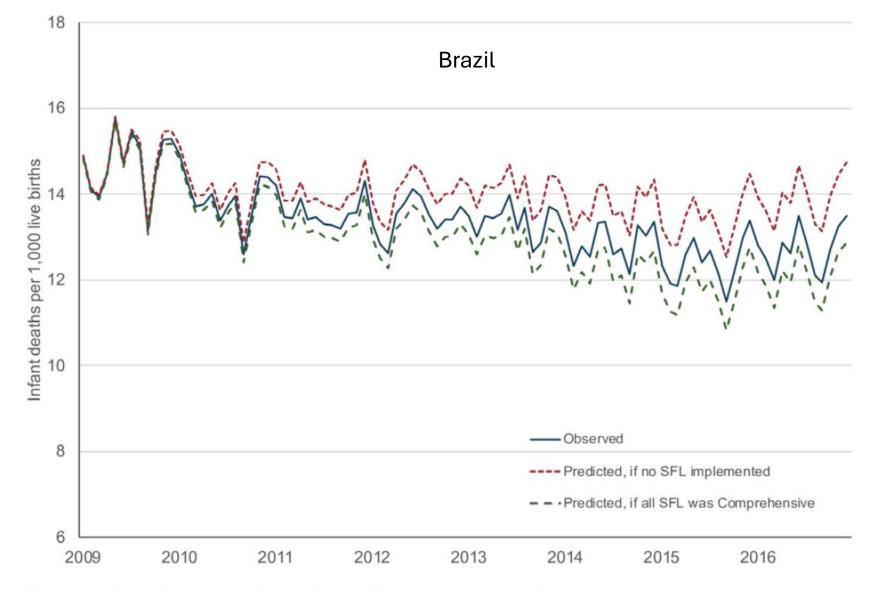


Figure 2 Observed and predicted national infant mortality rate under smoke free legislationscenarios (2009-2016). SFL, smoke-free legislation.

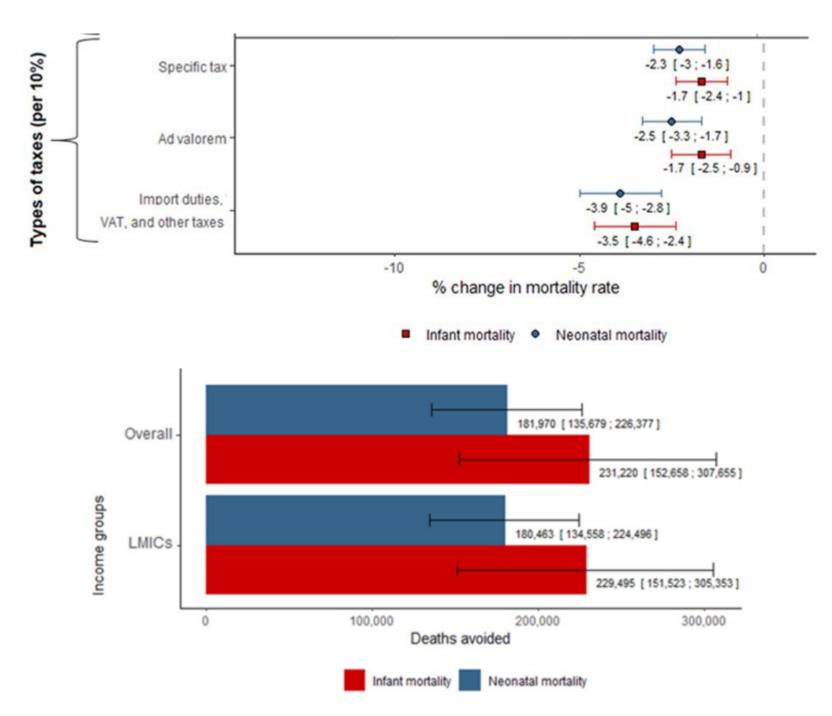


Fig. 1 Association between tobacco taxes and neonatal and infant mortality by type of taxes

Fig. 2 Neonatal and infant deaths averted by raising taxes to 75% by income group

Rado et al, PLOS Global Public Health, 2022

Table. Data on the Association of Infant Mortality With Median Cigarette Price and on the Price Differential Between Median and Minimum Cigarette Prices in 23 European Union Countries

	β (95% CI)		
Characteristic	Unadjusted	Adjusted	
Median cigarette price (per 1-€ increase per pack)			
Within year	-0.62 (-0.77 to -0.48)	-0.23 (-0.37 to -0.09)	
1-y Lag	-0.52 (-0.67 to -0.37)	-0.16 (-0.30 to -0.03)	
Price differential between median and minimum cigarette prices (per 10% increase)			
Within year	0.24 (0.17 to 0.32)	-0.04 (-0.08 to 0.01)	
1-y Lag	0.20 (0.13 to 0.27)	0.07 (0.01 to 0.13)	
GDP per capita (per €1000)	0.01 (-0.01 to 0.03)	0.03 (0.00 to 0.05)	
Comprehensive smoke-free legislation (Tobacco Control Scale smoke-free score ≥18)	-0.60 (-0.69 to -0.49)	0.03 (-0.14 to 0.20)	
Unemployment (per 10%)	-0.08 (-0.24 to 0.08)	0.17 (0.00 to 0.34)	
Educational level (per % of people aged 25-64 y with higher education)	-0.12 (-0.14 to -0.10)	0.01 (-0.02 to 0.05)	
Births by mothers at higher risk (% of all births by mothers aged <18 y or ≥40 y)	-0.19 (-0.26 to -0.12)	0.15 (0.06 to 0.25)	
Time (per calendar year)			
Linear term	-0.33 (-0.40 to -0.25)	-0.36 (-0.47 to -0.26)	
Quadratic term	0.01 (0.01 to 0.02)	0.01 (0.01 to 0.02)	

THEMATIC BRIEF

Tobacco control to improve child health and development



ERS Tobacco Control Committee



The committee works with professionals who are on the frontline in hospitals, clinics and universities; at the European level, with an office to monitor tobacco control; and at the international level through global conferences and membership of organisations such as the <u>Framework Convention Alliance</u>.

The committee has developed strong partnerships with cancer and heart organisations and encouraged a strict code of conduct for relations with the tobacco industry for ERS members.

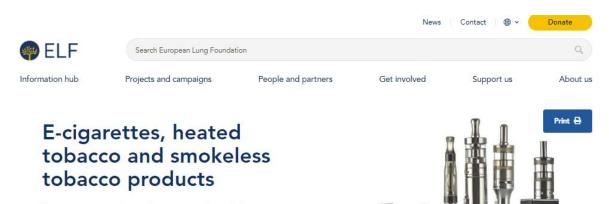
HEALTHY LUNGS FOR LIFE

Overview

- Focused on the importance of good lung health and the need for early intervention in childhood
- Working with multiple partners including
 - European Union
 - Clean Air Fund
 - WHO
 - CADSET
 - Austrian Lung Union
- Webpage for all activities: <u>https://europeanlung.org/en/projects-and-</u> <u>campaigns/healthy-lungs-for-life-vienna-2024/</u>



ELF Info Hub: e-cigarettes



Nicotine-containing products, such as e-cigarettes, heated tobacco products (HTPs) and smokeless nicotine pouches are becoming increasingly popular as an alternative to cigarettes. This page looks at the different products available and considers whether using these products is safe for the lungs.

Last Update 04/03/2024

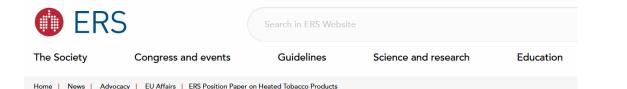
This content is available in multiple languages.



Access other languages

- Recently updated material for patients and public
- Now available in 9 languages

ERS past position papers



ERS Position Paper on Heated Tobacco Products

Author(s): Prof. Charlotta Pisinger on behalf of the ERS Tobacco Control Committee

A statement prepared by the ERS Tobacco Control Committee and approved by the ERS Advocacy Council, Science Council and Executive Committee



EDITORIA TOBACCO HARM REDUCTIO

ERS and tobacco harm reduction

Charlotta Pisinger¹, Elif Dagli², Filippos T. Filippidis ³, Linnea Hedman⁴, Christer Janson ⁵, Stelios Loukides⁶, Sofia Ravara⁷, Isabel Saraiva⁸ and Jørgen Vestbo⁹, the ERS Tobacco Control Committee, on behalf of the ERS



EUROPEAN RESPIRATORY JOURNAL EDITORIAL D.W. COX ET AL.

Statement on Tobacco 21 from the European Respiratory Society Tobacco Control Committee

Des W. Cox ^{1,2}, Lauren Rodriguez³ and Jonathan Grigg ⁴ on behalf of the Tobacco Control Committee of the European Respiratory Society



May 2019

ERS Position Paper on Tobacco Harm Reduction

Statement prepared by the ERS Tobacco Control Committee

Background & definitions



Novel and emerging nicotine products

- E-cigarettes
- Heated tobacco products (HTP)
- Nicotine pouches

Harm reduction

- Helping individuals transition to
 less harmful alternatives
- Drug use vs tobacco use

ERS positions – harm reduction



Despite tobacco industry's claims of 'harm reduction', the long-term health risks of novel products are unclear

- No strong –independentevidence to support claims of reduced risk
- Unknown long-term risks
- Accumulating evidence of respiratory and cardiovascular risks
- No 'safe' level of exposure

Much of the evidence about harm reduction comes from the tobacco industry itself. Records prove that the tobacco industry has never cared about eliminating smoking or its harms.

- Many of the studies supporting harm reduction claims have been funded by the industry
- Long history of deception no evidence the industry is concerned about health

ERS positions – emerging products



Even if novel nicotine and tobacco products presented lower risks for individual users compared to smoked tobacco, they could still cause net harm at a population level.

- Relatively lower risks for heavy smokers who switch vs. impact on non-smokers and smokers/dual users
- Individual vs population effect

Emerging tobacco and nicotine products may constitute a gateway towards nicotine addiction and smoking initiation among youth.

- Flavours and advertising appeal to youth
- Young e-cigarette users more likely to become smokers

ERS positions – context matters



There is no evidence of hardening among the smoking population over time, and the tobacco industry's claim that existing tobacco control measures are ineffective is misleading.

- Hardening: high dependence and low motivation to quit
- No evidence of this most smokers want to quit
- Tobacco control policies work

Context matters; failure to acknowledge this may result in net harm at the population level.

- 'Harm reduction' approaches may work differently in different contexts
- Particularly risky in places with high prevalence of smoking and poor regulation

ERS positions - quitting



Quitting smoking entirely is the best option

- Some evidence that e-cigarettes may aid smoking cessation in clinical settings
- Not helpful at the population level (outside clinical settings)
- Quitting nicotine is the recommended goal to achieve freedom from addiction

Evidence suggests novel tobacco and nicotine product users often engage in dual or poly tobacco product use, instead of fully replacing conventional cigarettes for harm reduction or cessation.

- Key premise of harm reduction: smokers will replace cigarettes with emerging products
- Many users continue to use cigarettes (dual/poly-use)

ERS positions - conclusions



The ERS does not recommend any lung-damaging products

and cannot recommend harm reduction as a population-

based strategy to reduce smoking and aid quitting.



Why focus on child health in tobacco control?

- Reasonably good data
- Ethically strong arguments
- Non-controversial

- Effective advocacy tool
- Non-stigmatising language
- Focuses on future benefits



Home News US Election Sport Business Innovation Culture Arts Travel Earth Video Live

UK smoking ban for those born after 2009 starts journey into law

Thank you!

E-mail: f.filippidis@imperial.ac.uk

