

Innovative thinking and legislation enforcement are key to reduce children's tobacco smoke exposure



Exposure to the detrimental effects of tobacco smoke is preventable. Improving public health through sustained efforts to reduce the burden associated with tobacco-related deaths and exposure to tobacco smoke remains a national and international goal for governments and policy makers.^{1,2} Despite unequivocal international evidence on the harms of tobacco smoke exposure, it remains a leading cause of premature mortality and morbidity, with evidence consistently showing no safe level of tobacco smoke exposure.³ Internationally, successful legislation more than a decade ago banning smoking in workplaces and public places has been instrumental in reducing tobacco smoke exposure.^{4,5}

Comprehensive legislative smoking bans in public places have improved child health, with reduced admissions for respiratory disease.^{4,5} However, little is known about the effects of legislation banning smoking in cars when children are present. In *The Lancet Public Health*, Timor Faber and colleagues' investigation of tobacco legislation creating smoke-free private vehicles for children offers a different perspective.⁵ With biochemically validated robust evidence drawn from 10 years of data, the authors show a continued risk for children from sustained smoking in private cars.⁵ Overall reductions in the percentage of children reporting exposure to tobacco smoke in cars is encouraging⁵⁻⁷ and international evidence suggests improved respiratory health outcomes.⁸ However, Faber and colleagues suggest that the reduction observed in children's exposure to tobacco smoke in cars is unlikely to stem entirely from the smoke-free private vehicle legislation and might be showing the wider impact of earlier tobacco legislation.⁵

Children have little control over their environment, meaning legislation and enforcement of laws are necessary to protect their human right to health.⁵ Decreasing tobacco smoke exposure is crucial for reducing social inequalities in health for populations; however, as Faber and colleagues have shown, children remain at risk of high levels of tobacco smoke exposure when travelling in private cars, with one in 20 children in England still reporting being regularly exposed to tobacco smoke in cars.⁵

Public Health England is in step with worldwide efforts to increase smoking cessation services and reduce smoking rates. An upwards smoking rate remains for minority populations and establishes a need for broader collaborative approaches, engaging specific population groups.⁶ Broader participatory methodologies, including co-designing smoking cessation programmes, need to be considered to ensure best outcomes for children's health and reduce their exposure to tobacco smoke and the subsequent impact on their respiratory health.

Reviewing existing tobacco legislation might offer an opportunity for evaluating awareness, enforcement, and compliance—especially given the role of these concepts to the critical success and adoption of wider smoking legislation.⁹ Opportunities for extending legislation could include a complete ban of smoking in private cars, regardless of whether children are present,⁵ and engaging with children themselves to identify other settings where they are exposed to tobacco smoke.

Engaging collaboratively with children and parents is essential to increase awareness and challenge stereotypes, social norms, and behaviours, and is required as part of ongoing strategic public health improvements for national health and social wellbeing.

Innovative and creative thinking will be needed to increase awareness and seek solutions for reducing exposure to tobacco smoke. Children's human rights must be upheld and an opportunity to engage with children themselves about their health and risk from tobacco smoke could emerge within the wider evaluation of smoke-free car legislation.¹⁰ Sustained multidisciplinary engagement is required at macro and meso levels to reduce the burden of smoke exposure in children and improve respiratory health.

Kate Frazer

School of Nursing, Midwifery and Health Systems, University College Dublin, Dublin 4, Ireland
kathleen.frazer@ucd.ie

I report grants from Health Research Board, outside of the submitted work.

Copyright © 2019 The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY-NC-ND 4.0 license.

Published Online
September 14, 2019
[http://dx.doi.org/10.1016/S2468-2667\(19\)30176-8](http://dx.doi.org/10.1016/S2468-2667(19)30176-8)
See **Articles** page e607

- 1 WHO. WHO report on the global tobacco epidemic, 2017 monitoring tobacco use and prevention policies. Geneva: World Health Organization, 2017.
- 2 WHO. 2014 global progress report on implementation of the WHO Framework Convention on Tobacco Control. Geneva: World Health Organization, 2014.
- 3 US Department of Health and Human Services. The health consequences of smoking—50 years of progress: a report of the surgeon general. Washington, DC: US Department of Health and Human Services, 2014: 11–255.
- 4 Frazer K, Callinan JE, McHugh J et al. Legislative smoking bans for reducing harms from secondhand smoke exposure, smoking prevalence and tobacco consumption. *Cochrane Database Syst Rev* 2016; **2**: CD005992.
- 5 Faber T, Mizani MA, Sheikh A, Mackenbach JP, Reiss IK, Been JV. Investigating the effect of England's smoke-free private vehicle regulation on changes in tobacco smoke exposure and respiratory disease in children: a quasi-experimental study. *Lancet Public Health* 2019; published online Sept 14. [http://dx.doi.org/10.1016/S2468-2667\(19\)30175-6](http://dx.doi.org/10.1016/S2468-2667(19)30175-6).
- 6 Statistics Team, NHS Digital. Statistics on smoking—England, 2018. July 3, 2018. <https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-smoking/statistics-on-smoking-england-2018/content> (accessed Sept 11, 2019).
- 7 Nguyen HV. Do smoke-free car laws work? Evidence from a quasi-experiment. *J Health Econ* 2013; **32**: 138–48.
- 8 Patel M, Thai CL, Meng YY, et al. Smoke-free car legislation and student exposure to smoking. *Pediatrics* 2018; **141**: S40–50.
- 9 Department of Health and Social Care, Welsh Government. Open consultation. The impact of tobacco laws introduced between 2010 and 2016. July 22, 2019. <https://www.gov.uk/government/consultations/the-impact-of-tobacco-laws-introduced-between-2010-and-2016> (accessed Sept 12, 2019).
- 10 Cox S, Dawkins L. Global and local perspectives on tobacco harm reduction: what are the issues and where do we go from here? *Harm Reduct J* 2018; **15**: 32.