



Smoke-free legislation in England has reduced stillbirths, neonatal mortality, and low birth weight

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Legislation to control smoking in public places should be considered across the world, researchers have said, after a study concluded that such action could save considerable numbers of young lives.¹

That view is based on the study's finding that the number of stillbirths and neonatal deaths in England fell by around 1500 in the first four years after smoke-free legislation was introduced in 2007. The research team, based in the Netherlands, United Kingdom, and United States, said that the legislation was associated with an immediate 7.8% reduction in stillbirths, a 7.6% reduction in neonatal mortality, and a 3.9% reduction in low birth weight.

The study, published in *Scientific Reports*, looked at more than 10 million births in England covering a 16 year period to 2011. It is one of the largest studies to have investigated the effect of smoke-free legislation on early life health and the first to focus on the perinatal mortality rate.

The researchers said that the positive effect on child health brought about by the legislation is likely to result from a mixture of reduced active smoking among adults and reduced exposure to secondhand smoke in the workplace, public places, and at home.

Currently, only around 18% of the world's population is protected by comprehensive smoke-free laws. The research group wrote, "Accelerated action to implement smoke-free legislation is likely to help save considerable numbers of young lives across the globe."

The group has previously shown that rates of premature births have dropped considerably in countries where smoke-free legislation has been introduced. The number of children being admitted to hospital for asthma attacks and severe respiratory infections has also fallen since the bans.

One of the study authors, Aziz Sheikh, co-director of the University of Edinburgh's Centre for Medical Informatics, said, "This study is further evidence of the potential power of smoke-free legislation to protect present and future generations from the devastating health consequences of smoking and secondhand exposure to tobacco smoke."

¹ Been JV, Mackay DF, Millett C, et al. Impact of smoke-free legislation on perinatal and infant mortality: a national quasi-experimental study. *Sci Rep* 2015; doi:10.1038/srep13020.

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