

# EXAMINING THE MORTALITY EFFECTS OF THE IRISH NATIONAL SMOKING BAN

**Sericea Stallings-Smith**, *Brunel University, West London, UK*

**Ariana Zeka**, *Brunel University, West London, UK*

**Pat Goodman**, *Dublin Institute of Technology, Dublin, Ireland*

**Luke Clancy**, *TobaccoFree Research Institute, Dublin, Ireland*

**Background and Aims:** Secondhand smoke causes disease and death in those exposed, with cardiovascular and respiratory problems as the most likely outcomes. The purpose of this study was to examine the mortality effects of the Irish national smoking ban of 2004.

**Methods:** Irish mortality data for years 2000-2007 were analysed for smoking ban effects following policy implementation in 2004. Population estimates for the years 2002 and 2006 were obtained from Irish census data and used to calculate death rates in adults (ages 18+) for each of the study years. Smoking-related causes of death were assessed by determining the absolute difference between the average death rates for pre-ban (2000-2003) versus post-ban (2004-2007) years. Analyses were conducted with SAS version 9.2 and Microsoft Office Excel 2007.

**Results:** These preliminary analyses indicated that when compared to pre-ban death rates, 5.63/10,000 (95% confidence interval [CI] = 0.98; 10.27) cardiovascular deaths were prevented for each year post-ban. On average, this was a 20% reduction in cardiovascular mortality. Additionally, 3.44/10,000 (95% CI = -0.19; 7.08) respiratory deaths were prevented, representing an average 22% reduction when compared to pre-ban years. This was roughly equivalent to 2,900 lives saved each post-ban year (with as few as 252 or as many as 5,560 lives saved). Further and more rigorous analyses are ongoing.

**Conclusions:** A decrease in smoking-related mortality was detected following the implementation of the Irish national smoking ban, indicating that comprehensive smoking ban policies can play a significant role in reducing mortality from cardiovascular and respiratory causes.