

# Public smoking ban: Europe on the move

Peter W. Radke and Heribert Schunkert\*

Medizinische Klinik II, Universitätsklinikum Schleswig-Holstein, Campus Lübeck, Ratzeburger Allee 160,  
D-23538 Lübeck, Germany

This editorial refers to 'Short-term effects of Italian smoking regulation on rates of hospital admission for acute myocardial infarction' by F. Barone-Adesi *et al.*, doi:10.1093/eurheartj/ehl201

Smoking, clearly, is the single most important avoidable cause of mortality and morbidity in developed countries. Adverse health effects of smoking are extensive, including lung cancer, cerebrovascular diseases, and chronic pulmonary obstructive disease.<sup>1</sup> A recent report estimated that worldwide, a total of nearly five million premature deaths annually are attributable to smoking.<sup>2</sup> In addition, overwhelming evidence demonstrates increased mortality and morbidity as a result of passive smoking (second-hand smoking).<sup>3,4</sup> Smoking, therefore, cannot be accepted as a matter of personal preference anymore. It clearly is a significant health threat to everybody exposed to cigarette smoke. Legal bans, together with increased taxation, are the most effective measures to decrease overall smoking.<sup>5</sup> Such bans do not only regulate smokers, but also—as a result—decrease active smoking. Perhaps, more importantly, these bans are likely to be effective in decreasing passive smoking.

Barone-Adesi *et al.*<sup>6</sup> provide another piece of evidence supporting the effectiveness of smoking regulations. The Italian Government has banned smoking in all indoor public places, including cafes, restaurants, and bars, from 10 January 2005. The authors thought of evaluating whether the introduction of the public smoking ban resulted in a short-term change of hospital admissions for acute myocardial infarction. In fact, Barone-Adesi and co-workers describe a significant reduction in the absolute number of admissions for acute myocardial infarction in patients <60 years from February–June 2004 (before ban) to February–June 2005 (after ban). Such a reduction was not seen in the control period (October–December 2003 to October–December 2004). On the basis of these observations in a population of more than four million inhabitants, the authors suggest that the observed reduction in smoking could account for an 11% reduction in admissions for acute myocardial infarction. A reduction of passive smoking might account for most of the observed effect.

Barone-Adesi *et al.* provide further pieces of evidence from national registries and surveys (i.e. 8.9% decline in cigarette sales, 7.6% reduction in cigarette consumption, >90% reduction in nicotine vapour phase concentration in pubs and discos) suggesting that the smoking ban in Italy did reduce overall smoking likely leading to the observed effect on myocardial infarction admissions.

The implications of the study for public measures of health are important. However, this study is not without limitations. First, epidemiological studies are potentially biased by confounding factors (i.e. seasonal variations) that are difficult to assess or control. Furthermore, the size of the effect among active compared with passive smokers remains rather speculative and is not supported by hard data. It would also have been interesting to learn more about potential changes in the relative prevalence of smokers among patients with myocardial infarction. Finally, the increase in acute myocardial infarction in patients >60 years remains incompletely understood. Nevertheless, this study confirms and extends recent observations following regulatory changes in the USA. Particularly, a significant decrease in hospital admissions for acute myocardial infarction was observed in the much smaller community of Helena, Montana, USA, after smoking had been banned from public and workplaces.<sup>7</sup>

Smoking bans have been criticized over the past decades for numerous reasons including the loss of profits from tax on tobacco products, potential property rights of bar or restaurant owners, and obvious financial interests of the tobacco industry. The argument of the 'victimless crime', however, clearly and finally has to leave the discussion based on accumulating data, including the current article by Barone-Adesi *et al.*

Historically, Pope Urban VII gave way to the world's first known public smoking ban in 1590,<sup>8</sup> as he threatened to excommunicate anyone who 'took tobacco in the porchway or of inside a church, whether it be by chewing it, smoking it with a pipe, or sniffing it in powdered form through the nose'. Scientifically, already in 1938, Raymond Pearl reported in *Science* that tobacco smoke shortened life span by about 10 years in 'heavy smokers'.<sup>9</sup> The deleterious consequences of passive smoking and the beneficial effects of smoking bans are increasingly discussed in the current literature. Furthermore, a growing number of public initiatives for smoking regulation—like the General Public Awareness Initiative 'World No Tobacco Day 2006' of the European Society of Cardiology—are actively campaigning. As a result,

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\* Corresponding author. Tel: +49 451 500 2500; fax: +49 451 500 6437.  
E-mail address: heribert.schunkert@innere2.uni-luebeck.de

**Table 1** Selected countries and smoking-free legislation

Country	Legislation
Argentina	Provincial and municipal jurisdictions have laws banning tobacco consumption in government offices and enclosed public spaces
Armenia	Law on restricting sale, consumption, and use of tobacco products nationwide in force on 2 March 2005, prohibits smoking in any public transport system and in all cultural, educational, and health institutions
Australia	Federal law banning smoking in all Commonwealth government buildings, most public transport systems, and airports. States and territories have banned smoking in enclosed public places, workplaces, and restaurants
Belgium	Smoking forbidden in all workplaces, state-owned and private, except restaurants, cafés, and so on. Total smoking ban in trains and railway stations. Buses and trams are smoke-free
Bhutan	Banned tobacco smoking and the sale of tobacco
Canada	No federal policy. All 10 provinces and two of three territories restrict smoking in public places
Germany	No federal policy. Smoking restricted in railway stations, selected trains, and schools in five states (in effect or planned)
India	Banned in public places since 1 May 2004. No-smoking areas required in bars, restaurants, and hotels. No smoking in train stations, trains, government offices, and all airports
Ireland	First country in the Northern Hemisphere to ban smoking in all enclosed spaces (bars, restaurants, hospitals, offices) since 29 March 2004
Italy	Banned in all indoor public places and in all workplaces since 10 January 2005
Malta	Banned in all entertainment establishments, including bars and restaurants, since October 2004. Separate smoking rooms allowed
New Zealand	Banned in all enclosed workplaces, including bars, clubs, and casinos, since December 2004
Norway	Banned in bars, clubs, and restaurants since 1 June 2004
South Africa	First country in the world to ban smoking in all public areas (1 October 2000), including bars and restaurants, unless ventilated, specified smoking room available

*Continued***Table 1** *Continued.*

Country	Legislation
Spain	Banned smoking in all workplaces, bars, and restaurants >100 m <sup>2</sup> since 1 January 2006
Sweden	Banned smoking in any business selling food or drink and in private parties since June 2005
USA	No federal legislation regarding smoking, but state and local laws
England	Ban from summer 2007 in all enclosed public places
Scotland	Banned in all enclosed public places since 26 March 2006

The General Public Awareness Initiative 'World No Tobacco Day 2006' of the European Society of Cardiology also provides an updated country-specific smoking statistics of European and non-European countries on the following webpage: [http://www.escardio.org/initiatives/prevention/FYHS/World\\_Tobacco\\_Day\\_2006.htm](http://www.escardio.org/initiatives/prevention/FYHS/World_Tobacco_Day_2006.htm)

an increasing number of cities, states, and countries worldwide have instituted smoking-free legislation (see *Table 1*). South Africa was the first country in the world to ban smoking in all public areas. Furthermore, states (such as California) and cities (such as New York City) in the USA instituted smoking-free regulations before EU countries did. Importantly, Ireland was the first country in the Northern Hemisphere to ban smoking in all enclosed spaces from 29 March 2004. Ireland, thereby, became a leading model for Europe regarding smoking regulations. Since then, Norway, Sweden, Italy, and Scotland have instituted countrywide smoke-free legislations and further EU countries will follow. It took quite a long time to implement smoking-free policies in the 'old world', but Europe is on the move.

**Conflict of interest:** none declared.

## References

1. Edwards R. The problem of tobacco smoking. *BMJ* 2004;**328**:217–219.
2. Ezzati M, Lopez AD. Estimates of global mortality attributable to smoking in 2000. *Lancet* 2003;**362**:847–852.
3. Glantz S, Parmley W. Even a little secondhand smoke is dangerous. *JAMA* 2001;**286**:462–463.
4. Raupach T, Schafer K, Konstantinides S, Andreas S. Secondhand smoke as an acute threat for the cardiovascular system: a change in paradigm. *Eur Heart J* 2006;**27**:386–392.
5. Fichtenberg CM, Glantz SA. Effect of smoke-free workplaces on smoking behaviour: systematic review. *Br Med J* 2002;**325**:188–194.
6. Barone-Adesi J, Vizzini L, Merletti F, Richiardi L. Short-term effects of Italian smoking regulation on rates of hospital admission for acute myocardial infarction. *Eur Heart J* 2006;doi:10.1093/eurheartj/ehl201. Published online ahead of print August 29, 2006.
7. Sargent RP, Shepard RM, Glantz SA. Reduced incidence of admissions for acute myocardial infarction associated with public smoking ban: before and after study. *BMJ* 2004;**328**:977–983.
8. Nicotine. In: Jack E, ed., *An Old-Fashioned Addiction*. Henningfield: Chelsea House Publishers; 1985. p96–98.
9. Pearl R. Tobacco smoking and longevity. *Science* 1938;**87**:216–217.