

Office of Tobacco Control

Clane Shopping Centre Clane, Co Kildare Ireland

Tel: +353 45 892 015 Fax: +353 45 892 649 Website: www.otc.ie email: info@otc.ie

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1. Executive Summary

Enclosed workplaces became smoke-free by law in Ireland on the 29th March 2004 under provisions in the Public Health (Tobacco) Acts, 2002 and 2004. Since then offices, shops, factories, bars, restaurants and other enclosed workplaces have been smoke-free.

The primary aim of the legislation is to protect third parties, particularly workers, from exposure to the harmful effects of second-hand smoke. Exposure to and inhalation of second-hand smoke is a cause of cancer, heart disease, respiratory disease and other illnesses.

This report presents a review of the smoke-free legislation in terms of compliance, public support and the health benefits, which are already accruing from the measure.

One year later the evidence is clear that the vast majority of enclosed workplaces are smoke-free and that clean, healthy smoke-free environments are part of normal work and social life.

Key findings:

- · Compliance with the smoke-free workplace legislation is very high
 - 94% of all workplaces inspected under the National Tobacco Control Inspection Programme were smoke-free
 - 92% of all workplaces inspected by the Health and Safety Authority were smoke-free
 - 93% of all hospitality workplaces inspected were smoke-free
- There is overwhelming support for the smoke-free law among smokers and nonsmokers
 - 98% of people believe that workplaces are healthier
 - 96% of people feel that the smoke-free law is a success
 - 93% of people think the smoke-free law is a good idea
- · Air quality in pubs has improved dramatically since the smoke-free law
- Levels of carbon monoxide have decreased by 45% in non-smoking bar workers
- 96% of all indoor workers report working in smoke-free environments since the introduction of the smoke-free workplace law

2. Compliance with the smoke-free workplace legislation

The overwhelming majority of enclosed workplaces in Ireland are now smoke-free due to consistently high levels of compliance with the smoke-free workplace legislation. The widespread support of employers, managers, proprietors, employees and the public – smokers and non-smokers alike has meant that the law is now part of normal work and social life. The work of environmental health officers and the health boards in building compliance with the legislation was essential in ensuring its smooth implementation.

Inspection data from the National Tobacco Control Inspection Programme and the Health and Safety Authority's inspection programme demonstrates compliance levels. Market research on public attitudes in respect of compliance with the smoke-free legislation supports this.

a. National Tobacco Control Inspection Programme

The National Tobacco Control Inspection Programme co-ordinated by the Office of Tobacco Control, and implemented by the Environmental Health Services of the Health Service Executive (formerly health boards), shows that nationwide compliance with the law throughout the first nine months of its implementation was consistently high.

A total of 34,957 inspections / compliance checks were conducted over the nine month period from the introduction of the law on March 29th to the end of 2004. The data from the health boards on inspections undertaken by environmental health officers gives an overview of compliance nationally.

Overall compliance levels remained high throughout the period with 94% of premises inspected being compliant in respect of the smoking prohibition i.e. no one smoking and no evidence of smoking in contravention of the law (section 47 of the Public Health (Tobacco) Act, 2002 as amended by section 16 of the Public Health (Tobacco) (Amendment) Act, 2004). The reported national compliance level in respect of the requirement for 'No Smoking' signage (section 46) is 86%. During the period, prosecutions were taken against twelve premises for non-compliance with the legislation, and all of these were successful.

The Office of Tobacco Control has operated a Smoke-Free Compliance Line since the introduction of the law. The line receives information calls, queries and complaints about non-compliance with the law. All complaints are passed to the appropriate enforcement agency and are prioritised in their inspection programmes.

In the period from 29th March to 31st December 2004 a total of 3,121 calls were made to the compliance line, including 1,881 complaints. The majority of calls were received in the first month and quickly declined to 40-50 per week. The downward trend in call rates suggests that notwithstanding an initial adjustment period, compliance levels are high.

Table 1 provides a summary of national data on inspections and compliance levels.

Table 1 – National Compliance Data

Business Type	Inspections	Compliance	
Hotel	1,454	93%	
Restaurant	6,873	99%	
Licensed Premises	14,400	90%	
Other	12,230	97%	
Total	34,957	94%	

b. Health and Safety Authority Inspection Programme

The Health and Safety Authority, through its inspection programme, monitors compliance with the smoke-free workplace legislation in enclosed workplaces such as offices and factories, which are not covered by the Environmental Health Services.

The Authority has recorded an average 92% compliance rate with the smoke-free workplace legislation since the law's introduction to the end of 2004. The Authority carried out 7,480 inspections for compliance with the law in relevant workplaces during 2004.

There was some variation in compliance across sectors, with a 94% rate in manufacturing, 92% compliance rating in the construction sector, and a rate of 93% in the mining and quarrying industries. Inspections in transport, storage and communications industries revealed an 89% compliance rate while the comparable figure in real estate, renting and business activities was 95%.

Table 2 - Health and Safety Authority Inspections - Compliance

	Inspections	Compliance	
Total	7,480	92%	

c. Research on public attitudes and behaviour on compliance

The Office of Tobacco Control commissioned market research from TNS mrbi on public attitudes in respect of compliance with the smoke-free workplace legislation.

An initial survey was conducted in March 2004 prior to the introduction of the law and similar surveys have been repeated since then. The most recent survey was conducted in February 2005. The surveys were conducted among a representative sample of 1,000 people aged 15 years and older. The research indicates that compliance with the law was high from the outset and remains so as is reported through the National Inspection Programme.

· All enclosed workplaces

• 96% of all indoor workers report that their work atmosphere was not smoky since the introduction of the smoke-free workplace law.

• Pubs

- Since the introduction of the new law, 98% of those surveyed who visited the pub within the
 previous fortnight reported that the atmosphere was not smoky. The comparable figure before the
 smoke-free workplace law was 46%.
- 99% of all smokers surveyed who visited the pub within the last fortnight either smoked outside or did not smoke at all. One in five smokers chose not to smoke at all when out socialising.

3. Public opinion on the smoke-free workplace legislation

There is overwhelming public support for the smoke-free workplace legislation (commonly known as the "smoking ban") among smokers and non-smokers. The smoke-free law is almost universally recognised as a success and a positive public health measure.

The most recent survey conducted by TNS mrbi for the Office of Tobacco Control, in advance of the one-year anniversary of the law, shows extremely high levels of public support: -

- 93% think the law was a good idea, including 80% of smokers;
- 96% of people feel the law is successful, including 89% of smokers;
- 98% believe that workplaces are now healthier because of the smoke-free law, including 94% of smokers.

The survey was conducted in March 2005 among a nationally representative sample of 1,000 aged 15 years and older.

Support was strong at the outset and has grown steadily since the smoke-free law was introduced as illustrated by surveys conducted among nationally representative samples. Before its introduction more than two thirds of the public supported the law (67%) while the vast majority of people wanted it to be complied with (81%).

Independent research conducted three months following implementation (June 2004) indicated that 89% of people (smokers and non-smokers alike) felt the law had been a success. Subsequent research for the Department of Health and Children (July 2004) indicated that public support had risen to 82% with 95% of people recognising it as a positive health measure.

In addition, in the national New Year's Poll ("2004 - How was it for you?") carried out for RTE television and broadcast on New Year's Day – the smoke-free law was voted the no. 1 "high" of 2004. The poll featured the top sporting, cultural, current affairs and other events throughout the year.

4. Health effects of smoke-free workplace legislation

The primary aim of the smoke-free legislation is to protect third parties, particularly workers, from exposure to the harmful effects of second-hand smoke. Bar staff and other hospitality workers are likely to have higher and more sustained exposure to second-hand smoke at work than other occupational groups.

International research in other jurisdictions has confirmed the health benefits of smoke-free laws. The emerging evidence in Ireland also demonstrates that the smoke-free legislation is having a direct and immediate positive impact through significantly improving workplace air quality and reducing carbon monoxide levels in hospitality workers. The studies outlined below form part of a large body of research being conducted in Ireland to assess the health impact of the smoke-free law e.g. the All Ireland Bar Study.

a. Workplace Air Quality

The high rate of compliance with the smoke-free legislation in Ireland is translating into better air quality in workplaces.

A study of 40 pubs throughout Dublin city and county assessed the levels of air pollution in pubs before and after the introduction of the smoke-free law (1). Airborne particles, which are the main constituents of tobacco smoke containing the chemicals known to be harmful to health were measured.

The particulate levels (PM10 and PM2.5) were measured over at least a three hour period at each premises. The repeat measurements were conducted on the same day of the week, and the same month, one year on.

The results from 24 bars, where exposure levels pre and post the law have been analysed, show that there has been a significant reduction in particulate levels in pubs following the introduction of the smoke-free law. The most striking results are for the smaller particles (PM 2.5) – these have been reduced by 87.6% while average levels of PM 10 have been reduced by 53%. (See Table 3 and Figure A.) Figure B shows the levels of air pollution in a typical pub in the study.

Table 3 – Air Quality in Dublin Pubs

Results (µgm ⁻³)	Pre Smoke-free	Post Smoke-free	% Change
Ave PM10	79	37.4	-53%
Ave PM2.5	40.2	4.97	-87.6%

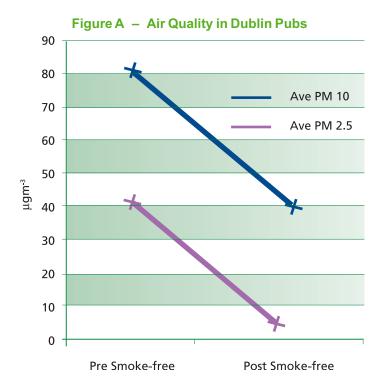
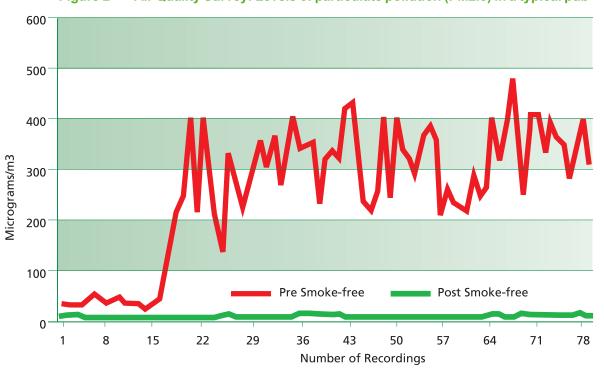


Figure B - Air Quality Survey: Levels of particulate pollution (PM2.5) in a typical pub



The results of this study are further emphasised by the finding of a dramatic fall in Ultrafine Particles in a supplementary study of 12 of the 40 Dublin pubs ⁽²⁾. This showed substantial decreases of between 62% and 83% in the ultrafine airborne particles since the implementation of the smoke-free law. The current levels are similar to the levels found in non-smoking homes.

b. Worker Protection

The smoke-free legislation is reducing workers' exposure to second-hand smoke.

A study carried out at the Respiratory Laboratory in St James's Hospital, Dublin, confirms the reduction in second-hand smoke exposure at work by documenting a marked decrease in carbon monoxide (CO) in bar workers (3). Carbon monoxide is a poisonous gas produced when cigarettes are burned and is linked to heart attacks and breathing failure.

The study evaluated breath carbon monoxide of 81 bar workers before the introduction of the smoke-free law and again one year later. Analysis of the tests on 56 (69%) of the bar workers has been completed and shows that there has been a very substantial fall (45%) in carbon monoxide in barmen who were non-smokers, and a decrease of 36% in ex-smokers.

5. Bar sales, hospitality employment and tourism data

The Retail Sales Index⁽⁴⁾, available from the Central Statistics Office (national statistics agency), shows that there has been a decline in the volume of bar sales since 2001. Bar sales declined in volume by 4.4% in 2004, while the decline for the previous year was 4.2%. Economic analysts suggest that this continuing downward trend is due to a number of factors including high prices, changing lifestyles, shifting demographic patterns.

The Central Statistics Office (CSO) also publishes statistics on employment in the hospitality sector in its Quarterly National Household Survey⁽⁵⁾. Employment rates in this sector are traditionally susceptible to fluctuations. The data shows a decline of 2.4% between the end of 2003 and 2004. However, the numbers employed in the sector at the end of 2004 exceeded those employed in 2002 by 0.6%

The most recent CSO data on tourism and travel⁽⁶⁾ (published February 2005) shows that there was a 3.2% increase in visitors to Ireland in 2004 when compared to 2003.

6. References and information sources

- (1) McCaffrey, M, Goodman, PG, Clancy, Luke (2005) Particulate pollution levels in Dublin pubs pre and post the introduction of the workplace smoking ban. Dublin: Scientific symposium "The Health Impacts of Smoke-free Workplaces in Ireland", March 2005
- (2) Kelleher, Kevin and McLaughlin, James (2005)

 Ultrafine airborne particle measurements in Dublin pubs before and after the smoking ban.

 Dublin: Scientific symposium "The Health Impacts of Smoke-free Workplaces in Ireland",

 March 2005
- (3) Agnew, M, Goodman, PG, Clancy, Luke (2005)

 Evaluation of the lung function of barworkers in Dublin, pre and post the introduction of a workplace ban on smoking in Ireland. Dublin: Scientific symposium "The Health Impacts of Smoke-free Workplaces in Ireland", March 2005
- (4) Central Statistics Office, Retail Sales Index available at: http://www.cso.ie/releasespublications/pr_services.htm
- (5) Central Statistics Office, Quarterly National Household Survey available at: http://www.cso.ie/qnhs
- (6) Central Statistics Office, Travel and Tourism available at: http://www.cso.ie/releasespublications/pr_tourism.htm

Allwright, Shane et al (2002) Report on effects of environmental tobacco smoke (ETS) in the workplace. Dublin: Health and Safety Authority/Office of Tobacco Control.

Health and Safety Authority Inspection Programme 2004.

Office of Tobacco Control (2005) Smoke-free workplace legislation implementation report, 2004. Dublin: Office of Tobacco Control.



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