Søren Højbjerg
Norgesmindevej 26
2900 Hellerup

Hellerup, den 17. marts 2006

Til: Folketingets Sundhedsudvalg
Christiansborg
1240 København K

Til medlemmerne af Folketingets Sundhedsudvalg.

Inden jeg bliver færdig med min næste store bandbulle til Folketingets Sundhedsudvalg om lungekræft, så vil jeg lige sende et eksempel på noget misinformation som The Office of Tobacco Control i Irland har ladet fabrikere. Det er en 'rapport' over forholdene i Irske pubber i Irland, USA og andre steder i verden. Rapporten er et stykke propaganda, som skal få den 'røgfrie' pest til at sprede sig via Irske pubber.

Denne rapport er et stykke vaskeægte junk science, der er så tydeligt, at selv det mest tungnemme medlem af Folketinget burde kunne gennemskue det.

<u>En masse ingenting.</u>

Rapporten har titlen "How Smoke-free Laws Improve Air Quality...", og er vedlagt dette brev.

Rapporten presenterer nogle målinger af 'partikler' i pubberne, og konstaterer at mængden af 'partikler' er reduceret med 90 %. Tænk virkelig - 90 % færre partikler. Det kunne man nok have opnået ved at åbne et vindue.

Det mest interessante ved undersøgelsen er det som den **ikke** måler. Den måler **ikke** om de ansattes helbred er blevet forbedret ved 'beskyttelse' imod 'passiv rygning'! Havde man målt det, tør jeg allerede nu forudsige at den havde vist en forbedring på

0 (nul, ingenting)

De ansattes mortalitet er overhovdet ikke forandret. Det er derfor man ikke har målt på den. Det ved de forstyrrede psykopater som har lavet rapporten udmærket. De ved nemlig at passiv rygning er harmløst. Derfor forlader de sig på at måle 'partikler' og foregiver at det skulle 'beskytte' helbredet.

<u>Effekten af rygerforbud.</u>

Et par amerikanske ryger rettigheds aktivister har målt effekten af indførelse af 'røgfrie' miljøer i de amerikanske stater, som har indført rygerforbud på 'offentlige steder' (som for en stor dels vedkommende faktisk er private). Den målte sundhedsmæssige effekt af forbudene er:

0 (nul, ingenting)

På side 2, næstsidste afsnit, forekommer følgende observation:

> "However, if dedicated researchers sift through enough small local jurisdictions with smoking bans, it may be possible to find a few unusual circumstances where a sharp decline in ER admissions for AMI has occurred at the same time a smoking ban took effect."

Det behøver jeg vel ikke at oversætte eller kommentere?

Rapporten hedder "Do Smoking Bans cause a 27 to 40% drop in admissions for myocardial infarction in hospitals?" og findes som bilag til dette brev.

Den anden side af historien.

Ja, men så fik De da indsigt i en anden side af historien end De plejer.

Jeg vender tilbage til Dem snarest.

Med venlig hilsen

Søren Højbjerg

(Borger)

Bilag

http://www.hsph.harvard.edu/irishstudy/irishstudy.pdf
http://kuneman.smokersclub.com/hospitaladmissions.html

How Smoke-free Laws Improve Air Quality: A Global Study of Irish Pubs

Feabhas ar an aer de bharr dhlíthe chosc an tobac: Staidéar Cuimsitheach ar Thithe Ósta na hÉireann

United States

Harvard School of Public Health
Division of Public Health Practice
Gregory N. Connolly, DMD, MPH
Carrie M. Carpenter, MS

Roswell Park Cancer Institute
Department of Health Behavior
Mark Travers, MS
K. Michael Cummings, PhD, MPH
Andrew Hyland, PhD

Ireland

Health Service Executive-West, Environmental Health Department, Galway
Maurice Mulcahy, MSc

Research Institute for a Tobacco Free Society
Professor Luke Clancy, BSc, MD, FRCPI

Office of Tobacco Control

Overview

When St. Patrick, known as the patron saint of Ireland, arrived in Ireland in the first half of the 5th century, tobacco was not known to Ireland or the rest of Europe. It wasn't until the middle of the 16th century that tobacco was introduced to this part of the world. Nearly 500 years later, smoking was banned in public places, making the air as clean as it was when St. Patrick arrived in Ireland.

In March 2004, the Republic of Ireland banned indoor smoking in all public spaces including restaurants and pubs. Many said that it could not be done, smokers would simply ignore the law and chaos and economic ruin would follow. Nearly two years later, the critics are silent, and hundreds of communities around the globe and nearly a dozen countries have followed Ireland's lead by adopting smoke-free legislation as the norm.

Irish pubs can be found in nearly every city in the world. Some are smoke-free, while others remain smoke-filled. We conducted a study to test the air quality of Irish pubs around the globe. Indoor air quality was assessed in 128 Irish pubs in 15 countries, between January 21, 2004 and March 10, 2006. Air quality was evaluated using an aerosol monitor which measures the level of fine particle ($PM_{2.5}$) pollution in the air. Fine particle pollutants, such as those generated from burning cigarettes, are less than 2.5 microns in diameter. These fine particles are especially dangerous since they can be easily inhaled deep into the lungs and result in a variety of adverse health effects including cardiovascular disease, respiratory morbidity, and even death.

Testing sites included 41 smoke-free Irish pubs in the Republic of Ireland, the United States, and Canada, and 87 smoking-permitted Irish pubs located in Armenia, Australia, Belgium, China, England, France, Germany, Greece, Lebanon, Northern Ireland, Poland, Romania, and the United States

The results of the study found that, overall, the level of air pollution inside Irish pubs located in smoke-free cities was 93% lower than the level found in pubs in smoke-permitted cities. Specifically, the average level of indoor air pollution in Ireland's authentic smoke-free pubs was 91% lower than Irish pubs in cities that allow smoking.

No doubt St. Patrick would prefer to see those who wish to celebrate in his honor do so in a place where workers and patrons alike can breathe fresh air free from tobacco smoke pollution.

Introduction

Secondhand smoke (SHS) exposure remains a major global public health concern that is entirely preventable.[1] SHS is a known human carcinogen containing at least 250 chemicals that are known to be toxic or carcinogenic[2], and is responsible for an estimated 3,000 lung cancer deaths annually in never smokers in the U.S., as well as over 35,000 deaths annually from coronary heart disease in never smokers, plus respiratory infections, asthma, Sudden Infant Death Syndrome (SIDS), and other illnesses in children.[3] SHS is a major source of respirable suspended particles (RSPs). A specific category of RSPs, known as $PM_{2.5}$ (i.e. particulate matter less than 2.5 microns in diameter), are very small particles suspended in the air which pose dangerous health effects. In order to protect the public health, the EPA has set limits of 15 $\mu g/m^3$ as the average annual level of $PM_{2.5}$ exposure and 65 $\mu g/m^3$ 24-hour exposure.[4]

Dangers of SHS exposure are highest among restaurant and bar workers who typically have low levels of protection provided by smoking regulations.[1,5-10] The most effective method for reducing SHS exposure in public places are policies requiring smoke-free environments.[11] The World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC) calls on governments to "protect all persons from exposure to tobacco smoke," rather than just specific populations such as children or pregnant women (Guiding Principle 4.1). This protection should be extended, according to Article 8.2, "in indoor workplaces, public transport, indoor public places and...other public places."[12]

In recent years, many U.S. states and cities have passed laws prohibiting smoking in workplaces including pubs and restaurants. In March of 2004, the government of Ireland banned smoking in worksites including public houses (pubs) making Ireland the first country to implement a nationwide policy. Given the smoking rates in Ireland and the association between smoking and visiting a pub, this was an historic event.

Previous studies in the U.S. have evaluated the impact of smoking legislation by measuring the difference in levels of RSPs between smoke-free venues and those that permit smoking.[13-16] Air quality assessment in Irish pubs showed a dramatic reduction in the presence of RSPs (PM_{10} and $PM_{2.5}$) following the implementation of the smoke-free law, with no adverse effects on business.[17,18] Despite claims that the law would not be adhered to and that it would have a negative impact on pub business, these have not been realized. Fong et al. reported high compliance with the Irish law,[19] and the Central Statistics Office (CSO) in Ireland recently reported a slight increase in the volume of bar sales between 2004 and 2005.[20]

Given the smoke-free policies in Ireland, a study of air pollution in Irish pubs globally provides an opportunity to assess the effectiveness of comprehensive smoke-free laws. The purpose of the study was to examine indoor air quality in a global sample of smoke-free and smoking-permitted Irish pubs. It was hypothesized that RSP levels, an important marker of secondhand smoke, would be significantly lower in smoke-free Irish pubs than in those pubs that allow smoking.

Methods

Overview

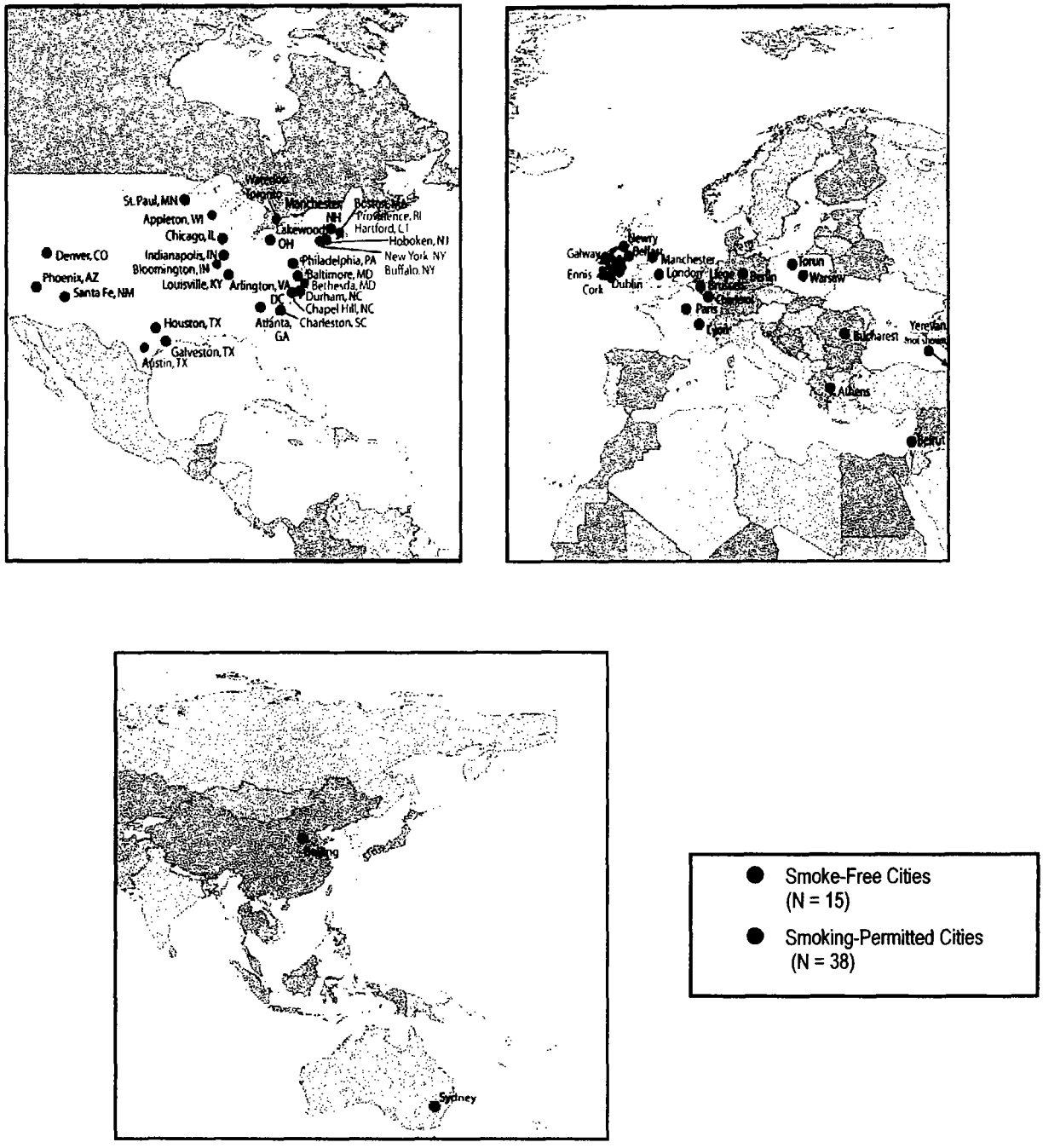
Between January 21, 2004 and March 10, 2006, air quality was assessed in 128 Irish pubs in 15 countries. The pubs were located in the Republic of Ireland, the United States, Canada, Australia, Northern Ireland, France, Lebanon, Belgium, Poland, Greece, Germany, China, England, Romania, and Armenia; Testing sites were conveniently selected by tobacco control professionals in their respective cities. Irish pubs were defined as those that served Irish beer on tap, and had an Irish name (e.g. Murphy's, O'Donnell's) or a visible statement that the venue was an Irish pub (e.g. exterior or interior sign with terms such as "Irish pub"). Testing was completed in smoking and smoke-free pubs on all the days of the week from afternoon onwards. Some pubs were individually-owned establishments and some were part of local or national chain entities.

Smoke-free Irish pubs were located in 3 cities and 1 town in the Republic of Ireland, (Cork, Galway, Dublin, Ennis), 2 cities in Canada (Toronto, Waterloo), and 9 US cities (Appleton, Austin, Bethesda, Bloomington, Boston, Buffalo, Hartford, Providence, New York City). Smoking-permitted pubs were located in 13 countries and 38 cities including Armenia (Yerevan), Australia (Sydney), Northern Ireland (Belfast, Newry), Germany (Berlin), Greece (Athens), Lebanon (Beirut), France (Lyon, Paris), Belgium (Brussels, Charleroi, Leige), Poland (Torun, Warsaw), China (Beijing), Romania (Bucharest), the United States (Arlington, Atlanta, Baltimore, Chapel Hill, Charleston, Chicago, Denver, Durham, Galveston, Hoboken, Houston, Indianapolis, Lakewood, Louisville, Manchester, Santa Fe, St. Paul, Philadelphia, Phoenix, Washington, D.C.) and England (London, Manchester) (see Figure 1).

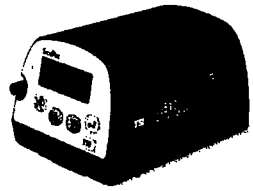
Measurement Protocol

A standard measurement protocol was used by data collectors across study sites. Establishments were tested for a minimum of 30 minutes. The number of people inside the venue and the number of burning cigarettes were recorded every 15 minutes during sampling. These observations were averaged over the time inside the venue to determine the average number of people on the premises and the average number of burning cigarettes. For most establishments, a sonic measure (Zircon Corporation, Campbell, CA) was used to measure room dimensions and hence the volume of each of the venues. When using the sonic measure to calculate room dimensions was not possible, room measurements were made through estimation.

Figure 1. Locations of Irish pubs sampled



A TSI SidePak AM510 Personal Aerosol Monitor (TSI, Inc., St. Paul, MN) was used to sample and record the levels of respirable suspended particles (RSPs) in the air. The SidePak uses a built-in sampling pump to draw air through the device where the particulate matter in the air scatters the light from a laser to assess the real-time concentration of particles smaller than 2.5μm in micrograms per cubic meter, or $PM_{2.5}$. The SidePak was calibrated against a laser photometer, which had been previously calibrated and used in similar studies. In addition, the SidePak was zero-calibrated prior to each use by attaching a HEPA filter according to the manufacturer's specifications.



The equipment was set to a one-minute log interval, which averages the previous 60 one-second measurements. Sampling was discreet in order not to disturb the occupants' normal behavior. For each pub, the first and last minute of logged data were removed because they are averaged with outdoors and entryway air. The remaining data points were averaged to provide an average $PM_{2.5}$ concentration within the venue.

Statistical Analyses

The primary goal was to assess the difference in the average levels of $PM_{2.5}$ in a cross-sectional sample of smoke-free and smoking-permitted Irish pubs, which was assessed with the independent-samples t-test. Descriptive statistics including the venue volume, number of patrons, and average smoker density (i.e. number of burning cigarettes per 100 m^3) are also reported for each pub and averaged for all pubs. The active smoker density was calculated by dividing the average number of burning cigarettes by the volume of the room in cubic meters (m^3).

Results

Table 1 provides a summary of the data collected in 128 Irish Pub including 25 authentic Irish pubs in the Republic of Ireland, 14 in non-smoking US cities, and 2 in Toronto, Canada. Eighty-seven smoking-permitted pubs were visited in 20 US cities, and 18 cities in other countries including Armenia, Northern Ireland, Greece, Germany, Lebanon, France, Belgium, Poland, China, England, Romania, and Australia. It should be noted that some cities will be subject to upcoming changes in smoking policies in their respective cities (London, Manchester (UK), Belfast, Newry, Hoboken, St Paul, Sydney).

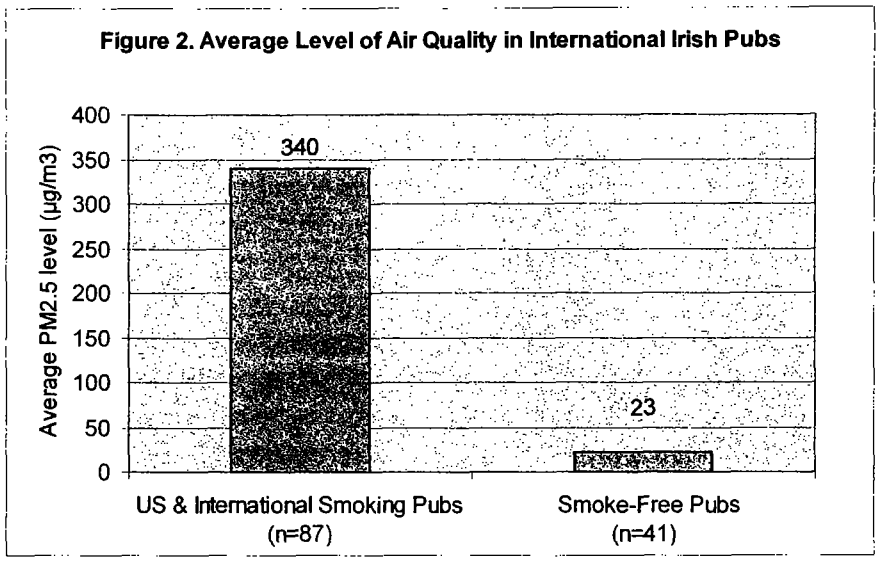
The average size of the 128 pubs was 935 m^3, with the smoke-free pubs being on average smaller than smoking-permitted pubs (427 m^3 vs. 1070 m^3). The average number of patrons present during sampling was 59, and consistent with their smaller size, the smoke-free pubs had fewer people on average than the smoking-permitted pubs (50 vs. 64).

Table 1. Summary of Each Irish pub Visited By Country and City

Country	State/Region	City	Policy	N	Mean $PM_{2.5}$ Level
US Smoke-free Pubs	8	9		14	14
	Connecticut	Hartford	Yes	2	18
	Indiana	Bloomington	Yes	1	10
	Maryland	Bethesda	Yes	1	8
	Massachusetts	Boston	Yes	2	13
	New York	Buffalo	Yes	2	15
		New York City	Yes	2	17
	Rhode Island	Providence	Yes	1	3
	Texas	Austin	Yes	1	22
	Wisconsin	Appleton	Yes	2	17
US Smoking Pubs	18	20		48	271
	Arizona	Phoenix	No	3	142
	Colorado	Denver	No	4	87
	Georgia	Atlanta	No	2	267
	Illinois	Chicago***	No	2	235
	Indiana	Indianapolis*	No	3	372
	Kentucky	Louisville*	No	5	342
	Maryland	Baltimore	No	1	87
	Minnesota	St. Paul***	No	4	276
	New Hampshire	Manchester	No	3	394
	New Jersey**	Hoboken	No	2	709
	New Mexico	Santa Fe	No	1	57
	North Carolina	Raleigh – Durham - Chapel Hill	No	2	170
	Ohio	Lakewood	No	3	425
	Pennsylvania	Philadelphia	No	2	293
	South Carolina	Charleston	No	3	236
	Texas	Galveston	No	2	363
		Houston*	No	1	108
	Virginia	Arlington	No	3	145
	Washington, D.C. ***	Washington, D.C. ***	No	2	184
Ireland		4		25	29
		Dublin	Yes	7	30
		Cork	Yes	6	32
		Ennis	Yes	4	32
		Galway	Yes	8	23
Canada		2		2	12
		Toronto	Yes	1	19
	Ontario	Waterloo	Yes	1	4
Other Nations		18		39	425
Armenia		Yerevan	No	1	498
Australia	New South Wales	Sydney	No	4	132
		Brussels	No	1	273
Belgium		Charleroi	No	1	876
		Liege	No	2	423
China		Beijing	No	1	145
England**		London	No	3	296
		Manchester	No	3	415
France		Paris	No	2	505
		Lyon	No	1	1051
Germany		Berlin	No	1	278
Greece		Athens	No	1	748
Lebanon		Beirut	No	2	730
Northern Ireland**		Belfast	No	7	353
		Newry	No	6	400
Poland		Torun	No	1	695
		Warsaw	No	1	538
Romania		Bucharest	No	1	623

*Limited ban (i.e., smoking is banned only in stand-alone restaurants or eating establishments that derive less than 25% of sales from alcohol)
**Statewide complete ban to be implemented spring 2006.
***Citywide complete ban to be implemented March 31, 2006, winter 2007, and summer 2008, accordingly.
****Nationwide complete ban to be implemented in 2007.
Note: This data is to be interpreted cautiously. Testing sites were selected on a convenience basis and may not be representative of pubs in each locality.

As shown in Figure 2, 87 pubs allowed smoking, and the average $PM_{2.5}$ level in these pubs was 340 $\mu g/m^3$ (SD = 270.4) ranging from 33 to 1320 $\mu g/m^3$. The average $PM_{2.5}$ level in the 41 smoke-free pubs was 23 $\mu g/m^3$ (SD = 18.0) ranging from 3 to 96 $\mu g/m^3$.



The level of indoor air pollution was 93% lower in the pubs that were smoke-free compared to those where smoking was permitted. The difference between the mean RSP levels was statistically significant ($t = -10.881$, $df = 88$), $p<.001$.

Figure 3 shows the average air pollution levels found in Irish pubs in the Republic of Ireland compared to those outside Ireland where smoking is permitted. The average $PM_{2.5}$ level in authentic Irish pubs was 29$\mu g/m^3$. The level of indoor air pollution was 91% lower in the Republic of Ireland's pubs than in US and international smoking- permitted pubs (340$\mu g/m^3$).

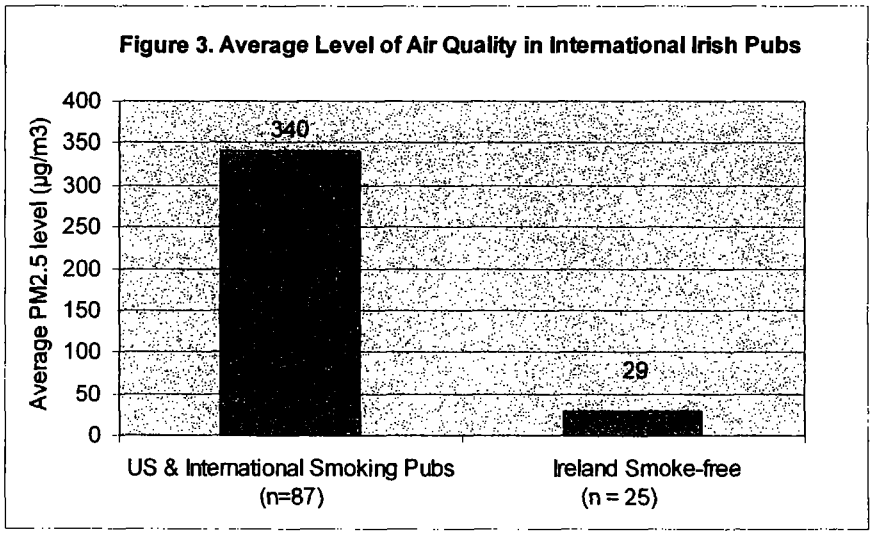


Figure 4 shows the average air pollution levels found in Irish pubs across world regions. The average $PM_{2.5}$ level in smoke-free Irish pubs in the U.S./Canada (14 $\mu g/m^3$), and the Republic of Ireland (29 $\mu g/m^3$) are significantly lower than levels in smoking-permitted pubs in the U.S. (271 $\mu g/m^3$), other nations (China, Australia, Armenia, Lebanon) (328 $\mu g/m^3$), Northern Ireland (375 $\mu g/m^3$), and Europe (504 $\mu g/m^3$).

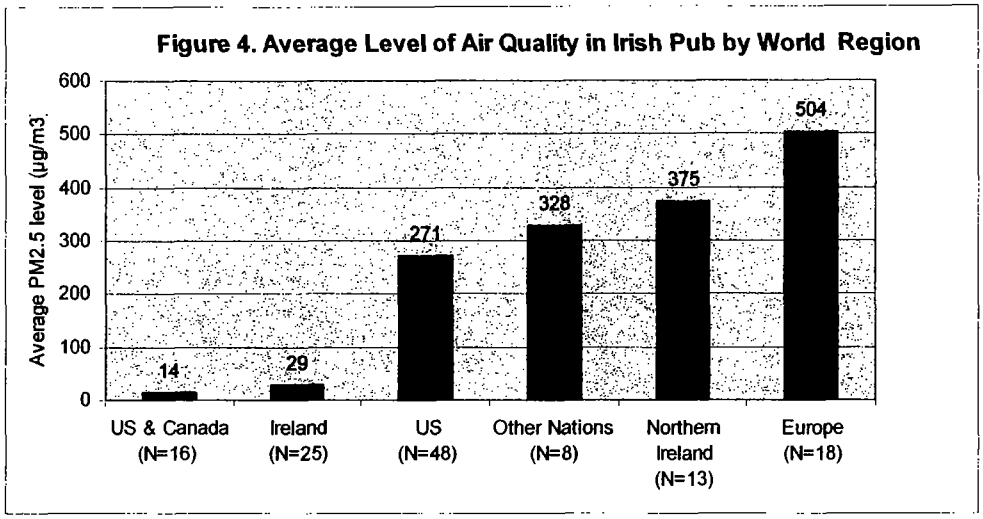
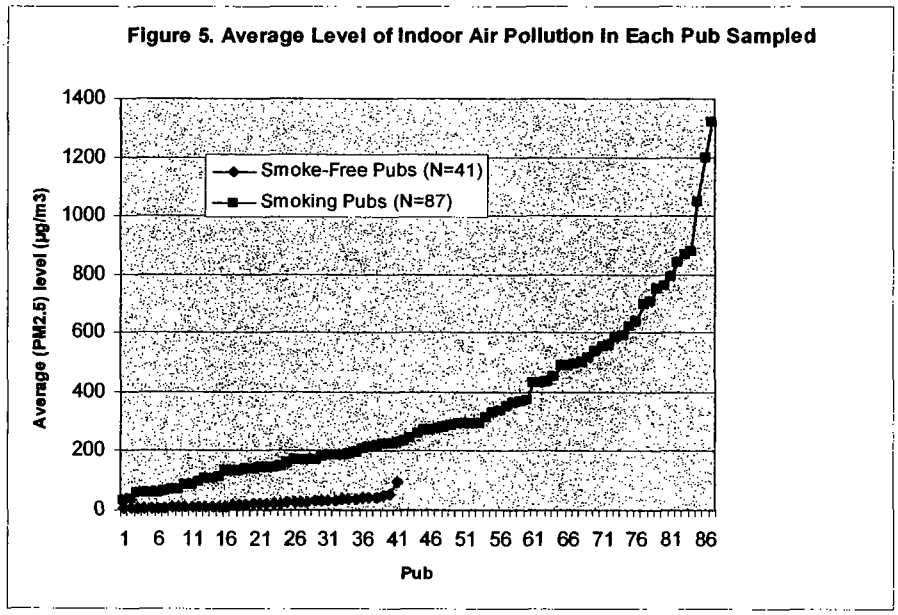
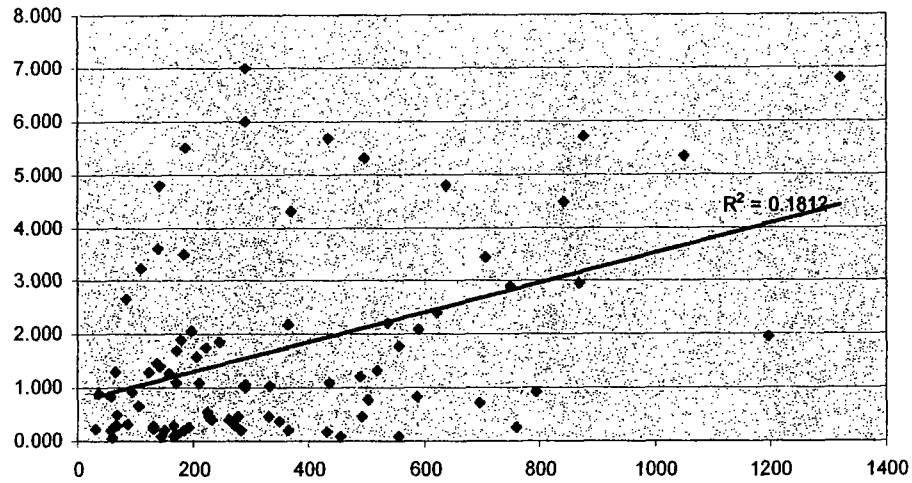


Figure 5 shows the average indoor air pollution level in each of the 87 smoking pubs tested. Average $PM_{2.5}$ levels in smoke-free pubs and smoking pubs ranged from 3 to 96 $\mu g/m^3$ and 33 to 1320 $\mu g/m^3$, respectively. While the average level in all of the smoking-permitted pubs is 15 times higher than in smoke-free pubs Figure 5 shows that many pubs were much higher, with levels in excess of EPA standards. The EPA annual (15$\mu g/m^3$) and 24-hour (65 $PM_{2.5}$ $\mu g/m^3$) exposure limits were exceeded by 100% and 95% of the smoking-permitted pubs, respectively.



The average smoker density was much greater in the smoking permitted pubs (n = 87) (1.69 burning cigarettes per 100 m^3) compared to the smoke-free locations (0.00 burning cigarettes per 100 m^3). No smoking was observed in any of the pubs with smoke-free policies. As shown in Figure 6, average $PM_{2.5}$ levels were significantly positively correlated ($r = 0.43$, $p < 0.01$) with smoker density. Variation in amounts of ventilation (e.g. air conditioning, open doors/windows) may influence $PM_{2.5}$ levels. Testing did not control for ventilation or smoke that may have migrated from outdoors where smokers tend to smoke.

Figure 6. RSP Level vs. Smoker Density for Smoking Pubs



Discussion

This study demonstrates that national and subnational smoking policies have dramatically improved indoor air quality in a sample of international Irish pubs. Indoor air quality testing indicated that, on average, levels of $PM_{2.5}$ in smoke-free Irish pubs (23 $\mu g/m^3$) were 93% lower compared to smoking-permitted Irish pubs (340 $\mu g/m^3$). These findings are consistent with other US studies that have examined changes in air quality to evaluate the impact of smoking legislation.[14-16] Studies conducted in the Republic of Ireland have shown similar reductions in small particles[17] as well as air nicotine concentrations.[21] The absence of smokers in smoke-free pubs indicates that workplace owners and patrons are complying with these laws, across the world.

Other studies have directly assessed the health effects of SHS exposure. One study found improvements in respiratory health among bartenders after the implementation of a statewide smoking ban,[22] and another study reported reductions in acute myocardial infarctions in patients admitted to a hospital after the implantation of a local smoking ban.[23] An examination of SHS exposure among workers following Ireland's comprehensive ban showed significant reductions in air nicotine and saliva cotinine.[21] Respiratory health studies in Ireland have shown results similar to California as well as dramatic reductions in exhaled carbon monoxide and ambient Benzene levels post the smoking ban.[24] According to Repace et al. (2006), RSPs are correlated with biological markers for exposure (e.g. nicotine, cotinine) which can be used to predict adverse health outcomes.[25] These results further confirm that these laws effectively reduce SHS exposure and can provide health benefits, worldwide.

Many US states and foreign countries have implemented policies for smoke-free workplaces including restaurant and pubs. The countries that currently have indoor smoking bans that cover pubs include: Ireland, Bhutan, Malta, Norway, Sweden, Italy, New Zealand and most recently, England (effective 2007), Scotland (upcoming), Northern Ireland (effective 2007) and Uruguay. U.S. states with smoke-free laws in workplaces including pubs are: California, Connecticut, Delaware, Maine, Montana (2009), New Jersey (April, 2006), New York, Massachusetts, Rhode Island, Utah (2009), Vermont, Washington. Washington DC and Puerto Rico have also passed such laws. Washington DC will extend to cover bars in January, 2007. Many U.S. communities have adopted local smoke-free laws. As of January 2006, 28% of the US population was covered by local or state-wide smoke-free bar laws, and almost 40% of the population was covered by any smoke-free law (i.e. workplace, restaurant, bar).[26]

There are limitations to this study. Convenience samples of Irish pubs and locations were used and thus, findings may not be representative of all Irish pubs. SHS is not the only source of indoor levels of $PM_{2.5}$ and other sources such as ambient particle concentrations, cooking, and migration of tobacco smoke pollution from outside could contribute to overall levels of indoor air pollution. We would expect, however, that other sources would be present in both smoke-free and smoking-permitted pubs and thus, differences in average $PM_{2.5}$ are largely attributable to SHS.

Conclusions

Irish pubs in the Republic of Ireland and smoke-free "Irish pubs" elsewhere are significantly less polluted than "Irish pubs" that permit smoking. These findings underscore the importance of comprehensive smoke-free policies. National and subnational policies that prohibit smoking in public worksites, including restaurants and pubs, dramatically reduce secondhand smoke exposure and improve the health of workers and patrons.

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Do Smoking Bans cause a 27 to 40% drop in admissions for myocardial infarction in hospitals?

A preliminary study
by David W. Kuneman and Michael J. McFadden

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In April 2004, the British Medical Journal reported a study which found a 40% drop in hospital admissions (from 40 expected admissions to 24 actual admissions) for acute myocardial infarction (AMI) while a local smoking ban was in effect in Helena MT. Recently, a media release claimed a 27% reduction (from 399 expected admissions to 291 actual admissions for AMI) was found in Pueblo CO after its smoking ban took effect. Is this proposed effect the result of selective research, or can any jurisdiction considering a ban expect similar results?

Data on state-specific emergency room admissions for acute myocardial infarction are available at http://hcup.ahrq.gov/HCUPnet.asp This is the **Healthcare Cost and Utilization Project** which is a family of health care databases and related software tools and products developed through a Federal-State-Industry partnership and sponsored by the Agency for Healthcare Research and Quality(AHRQ). HCUP is based on statewide data collected by individual data organizations across the United States and provided to AHRQ through the HCUP partnership.

Researchers and policymakers use HCUP data to identify, track, analyze and compare hospital statistics at the national, regional and state levels. Acute myocardial infarction data are available in this system and can be used to study states with smoking bans.

However, not all states participate in HCUP. Some states which have passed smoking bans do participate, but passed their bans in 2004 and that data are not yet available. Other states, such as Utah and Vermont participate, but passed their bans before HCUP was initiated and data before and after those bans are not available. California, Florida, New York, and Oregon passed their bans while contributing data to HCUP, and therefore afford an opportunity to examine if their ER admissions for acute myocardial infarction declined similarly to Helena and Pueblo.

Florida's smoking ban applies to most bars, and all clubs, and restaurants and took effect July, 2003. According to the HCUP database, Florida hospitals admitted 40,077 AMI patients during 2002 and 39,783 patients during 2003. Since the ban was only in effect for half of 2003, only half of the 35% decline in ER admissions for AMI predicted by the Helena study and the Pueblo press release should have occurred, which is 17%. While Florida did experience a 1% decline in these admissions, this is a far cry from the anticipated 17% drop which would have occurred if the effect were real, and well within the expected statistical variation which ordinarily occurs in such numbers.

New York State's smoking ban also applies to bars, clubs, and restaurants and also took

effect July 2003. According to the HCUP database, New York hospitals admitted 31,728 AMI patients during 2002, and 31,888 patients during 2003. Since the ban was only in effect for half of 2003, again, a 17% decline in ER admissions for AMI would have been expected which would have been a decrease of 5,394 admissions. Instead of a decrease of thousands though there was an actual increase of 160 admissions. These findings again are in direct conflict with the findings and the message of the researchers in the Helena study and Pueblo press release.

Oregon banned smoking in all restaurants which allow children effective July 2001. Smoking is still allowed in restaurants which do not allow children, and in bars and clubs not locally banned prior to July1, 2001. While this ban does not cover all establishments, some of the 35% reduction in ER admissions for AMI in Oregon hospitals should have been realized because patrons and workers in banned establishments should have been protected. According to the HCUP database, Oregon hospitals admitted 4,957 patients for AMI in 2000, admitted 4,927 in 2001, and 5,125 in 2002. Again, instead of a significant decrease in ER admissions for AMI, we find that AMI admissions actually increased by 4% in 2002, the first full year after the ban took effect.

California banned smoking in restaurants January, 1995, but HCUP data are not available for 1994 and 1995. California extended the ban to other kinds of establishments, including bars in January, 1998. According to the HCUP database, California hospitals admitted 40,608 AMI patents during 1997, and 43,044 during 1998. Again, based on the data and claims made about Helena and Pueblo, a decrease in AMI patients should have been observed, and again rather than a decrease the figures showed an increase... an increase of 2436 cases, an increase of 6% in AMI admissions after the full ban. While the simple extension of the ban to bars would not be expected to produce the 27 to 40% decrease reported in Helena/Pueblo, the extension should certainly have been expected to produce a decrease, rather than an increase in the number of California admissions for AMI if the proposed effect were real.

Although California banned smoking in restaurants January 1995, and data are not available through HCUP, California was conducting a similar in-state hospital performance study based on AMI admissions and 30-day survival rates in most public hospitals (http://www.oshpd.ca.gov/HQAD/Outcomes/Studies/HeartAttacks/ami_94-96/V19496.pdf)

This study reported a grand total of 41,927 patients admitted into these hospitals for AMI during 1994, and 42,183 admitted in 1995, after the restaurant-only ban took effect. This represents almost all ER admissions for AMI in California during the two years. Again, no 30 or 40% decline in ER admissions for AMI as predicted by Helena/Pueblo actually occurred. And again, an increase, although small and nonsignificant, actually occurred.

Statistically, it is much less likely large populations will experience unusual circumstances where ER admissions for AMI decline suddenly and randomly. However, if dedicated researchers sift through enough small local jurisdictions with smoking bans, it may be possible to find a few unusual circumstances where a sharp decline in ER admissions for AMI has occurred at the same time a smoking ban took effect.

Helena and Pueblo have a combined population of approximately 200,000 people. California, Florida, New York and Oregon, which have bans, have a combined population of approximately 70,000,000 people... 350 times the population of that studied in Helena and Pueblo. The number of AMIs examined in Helena and Pueblo

combine to a total of about 315, the number of AMIs examined in the combined states studied here total over 315,000, i.e. 1,000 times the number examined in the combined jurisdictions of Helena and Pueblo.

And yet neither the medical journals nor the media have paid any notice at all to the fact that in vastly larger populations, virtually no change in acute myocardial infarction rates after smoking bans has occurred. Statistically this larger population base makes for a far more stable statistical environment and the data from this population would provide a far sounder scientific basis for decisions about smoking bans that will affect the lives and livelihoods of millions of people.

And yet this story has been told by no one, broadcast nowhere, and heard by not a soul.

David W. Kuneman
Assistant Midwest Regional Director
The Smoker's Club, Inc.

Michael J. McFadden
Author of ***Dissecting Antismokers' Brains***
Mid-Atlantic Regional Director
The Smoker's Club, Inc.

The authors have no competing financial interests to declare. Mr. Kuneman's worked for several years as a research chemist at 7-Up two decades ago (at a time when 7-Up had been formally bought by Philip Morris) and Mr. McFadden's is the author of a book in the area of interest.

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