



# Policies to reduce tobacco harms: How do we know what works?

K. Michael Cummings and Geoff Fong for the ITC Collaboration

# Goals and key elements of ITC Project

**Goal:** Build and disseminate the evidence base for tobacco control policies

**Motivation:** Framework Convention for Tobacco Control– different countries implementing different policies

**Method:** Multi-country controls, longitudinal design, common conceptual framework implement in participating countries

**Where:** 4-countries in 2002, now up to 13 countries



## **Key requirements of FCTC treaty**

- Ban tobacco advertising, sponsorship and promotion, where constitutions allow, within five years
- Tobacco packaging must include health warnings covering at least 30% of packet within 3 years
- Introduce measures to protect people from second-hand tobacco smoke in public places
- Draw up strategies to combat smuggling
- Adopt tax policies which discourage smoking
- Product regulation

# Goal of ITC Project to evaluate and understand the effects of national-level policies

- Does a particular policy achieve its goals?
- How and why does the policy “work”?
- Policy evaluation can inform and shape the course of future policies in other countries

# ITC was launched in 2002 with 4-countries (USA, Canada, UK, Australia)

## **Project 1- (Fong – PI)**

***Tobacco Control Policy Evaluation in Developed Countries (continuation of the 4-country ITC study)***

## **Project 2- (Borland – PI)**

***Tobacco Control Policy Evaluation in Southeast Asia (adds two new countries to the ITC study – Thailand and Malaysia)***

## **Project 3 - (Giovino – PI)**

***Policy Effects on Cigarette Design, Emissions & Behavior (joint effort with CDC to track a cohort of leading cigarette brands in each ITC country)***

# Common Methods

- Cohort study: 40-minute phone survey conducted every 12 months for 5 years
  - Random digit dialing (high quality probability samples)
- Two-call procedure:
  - Recruitment call (10 min.): screening and recruitment
  - Compensation mailed to respondent the next day
  - Main survey (40 min.): usually one week later

# 4 survey waves completed

- ◆ Adult smokers from four countries:
  - Canada (N=2,193)
  - United States (N=2,115)
  - United Kingdom (N=2,344)
  - Australia (N=2,271)
- ◆ Cohort survey:
  - Wave 1: October–December 2002
  - Wave 2: May–August 2003
  - Wave 3: May–August 2004
  - Wave 4: October–December 2005

# Highlights

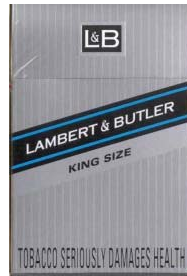
- Product warnings
- Smoke-free air policies
- Product regulations

# UK WARNING ENHANCEMENT

October 2002

May 2003

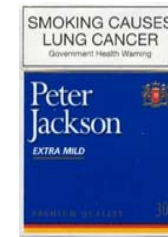
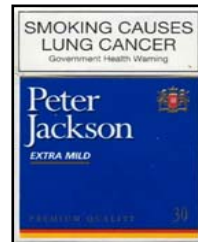
U.K.



Canada



Australia



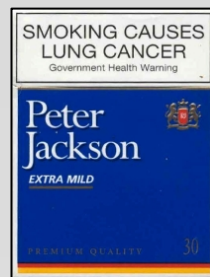
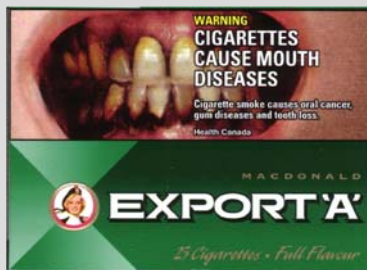
U.S.



# SOURCES OF HEALTH INFORMATION

“Have you noticed information that talks about the dangers of smoking or encourages quitting on CIGARETTE PACKS?”

CAN	AUS	UK	US
84%	69%	56%	47%*



Hammond et al., *Tob Control* (In press).

\* $p < .001$

# UK ENHANCEMENT: IMPOTENCE

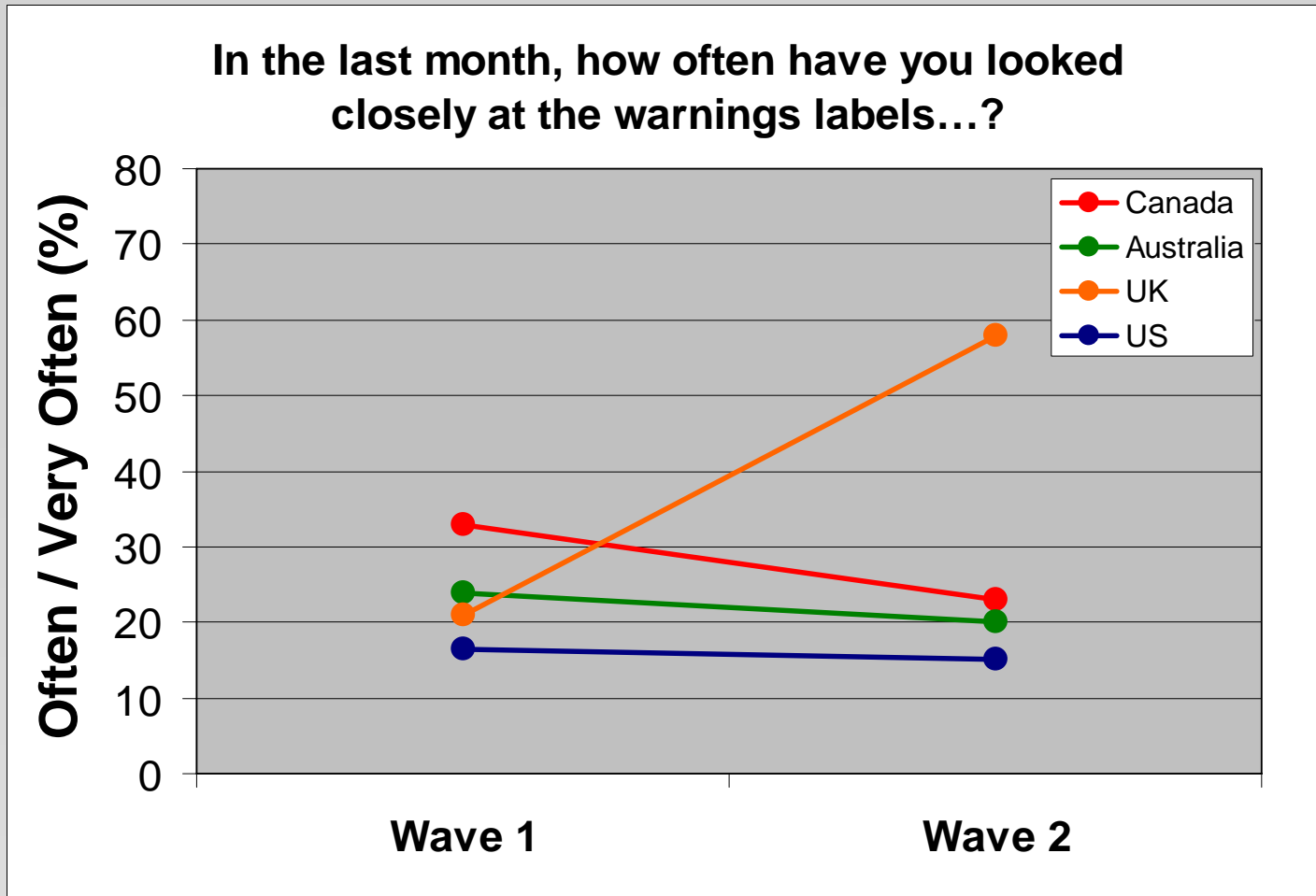


**Wave 1**  
**(Oct-Dec 2002)**



**Wave 3**  
**(June-Dec 2004)**

# UK WARNING ENHANCEMENT



**Substantial increase in the U.K. compared to the other countries ( $p < .0001^*$ )—above all countries at W2**

# UK ENHANCEMENT: IMPOTENCE

SMOKING CAUSES IMPOTENCE	CAN	AUS	UK	US
WAVE 1	<p>WARNING TOBACCO USE CAN MAKE YOU IMPOTENT</p> <p>60%</p> <p><small>Cigarettes may cause sexual impotence due to decreased blood flow to the penis. This can prevent you from having an erection. Health Canada</small></p>	36%	36%	34%
WAVE 3	<p>WARNING TOBACCO USE CAN MAKE YOU IMPOTENT</p> <p>63%</p> <p><small>Cigarettes may cause sexual impotence due to decreased blood flow to the penis. This can prevent you from having an erection. Health Canada</small></p>	45%*	50%*	33%

\* $p < .001$

Substantial increase in the U.K. compared to the other countries ( $p < .0001$ \*)—above all countries at W2

# Smoke-free air policies

USA TODAY · TUESDAY, OCTOBER 18, 2005 · 7D

Health

## Ireland's smoking ban reaps benefits

### One year later, pub workers show fewer lung ailments

By Liz Szabo  
USA TODAY

One year after the Irish Republic became the first country with a nationwide ban on smoking in workplaces, pub employees already are breathing easier, a study shows.

The number of non-smoking bar workers with respiratory problems, such as coughs, has fallen 17%, according to a study published online Monday in *BMJ*, formerly the *British Medical Journal*.

Researchers found no improvement in neighboring Northern Ireland, which did not ban smoking, the study shows. Inspired by its neighbor's success, however, the British government on Monday announced that Northern Ireland will ban smoking in enclosed workplaces in 2007.

In the study, researchers measured pub workers' levels of a nicotine byproduct called cotinine that scientists used to track a person's exposure to tobacco. Cotinine levels fell by 80% after the ban in the Irish Republic but only 20% in Northern Ireland, the study shows. That suggests pub workers in the Irish Republic today are exposed to less secondhand smoke, which can lead to cancer and heart disease.

Another new study, published in the journal *Tobacco Control*, finds that air is cleaner today because of the ban.

Researchers found tobacco smoke in 98% of bars before the ban but only 5% afterward, the article says. In the United Kingdom, the rate of smoking in bars has remained nearly universal; it decreased from 98% to 97% in the same period.

The republic's new law has proven popular, even with smokers: 83% of Irish smokers say the law was a "good" or "very good" thing, the study says.

Nearly half of Irish smokers say the ban



**Clearing the air:** A Dubliner smokes in a pub in 2003 before a ban on smoking in bars, restaurants and the workplace took effect.

By John Cogill, AP

has made them more likely to quit, according to the *Tobacco Control* article. Among Irish smokers who have quit, 80% said the law helped them give up smoking, and 88% say the ban helped them remain smoke-free.

The ban is not universally popular, however. The Vintners Federation of Ireland, which represents rural pubs, says the ban has led to declining sales and has cost some bar workers their jobs.

In a statement issued in March on the first anniversary of the ban, the organization said that 26 pubs had closed in County Clare alone.

### Indoor smoking: A comparison

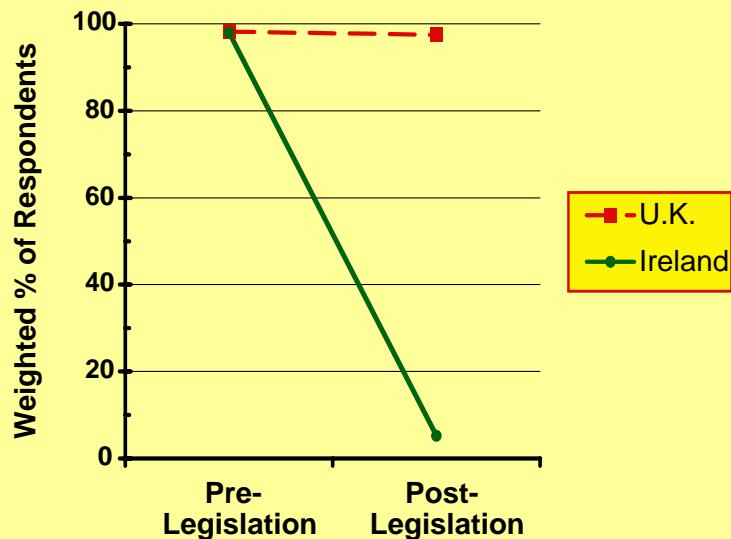
Bar employees today in the Irish Republic, which banned smoking in indoor workplaces, are healthier today than their counterparts in Northern Ireland, which will not restrict smoking until 2007.

	Irish Republic		Northern Ireland	
	2003-2004	2004-2005	2003-2004	2004-2005
Workers with respiratory symptoms	65%	49%	45%	45%
Hours exposed to smoke at work	40.0	0	42.0	40.0
Hours exposed outside work	4.0	0	0	2.5

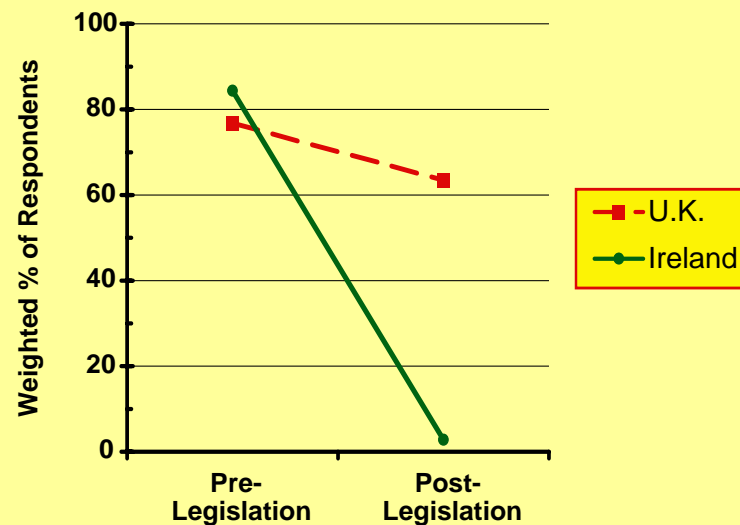
Source: *BMJ*

# Were Irish smokers exposed to less SHS after the smokefree law?

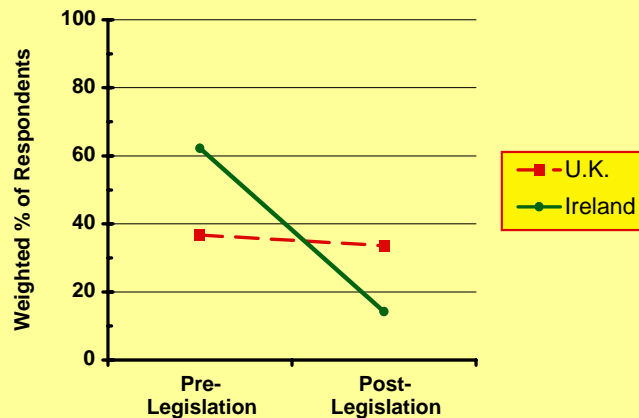
### Reported Smoking in Bars/Pubs—Last



### Reported Smoking in Restaurants—Last

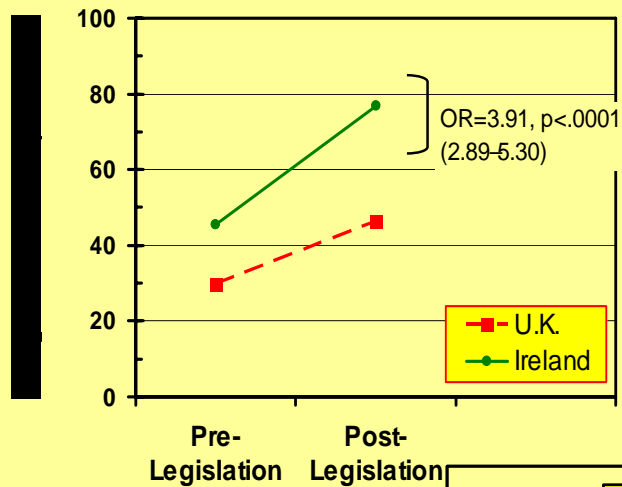


### Reported Smoking in Workplaces—Past Month

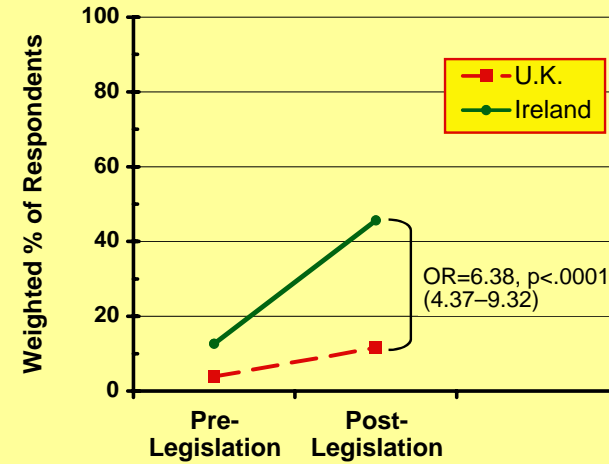


# How did support among Irish smokers change after the implementation of the law?

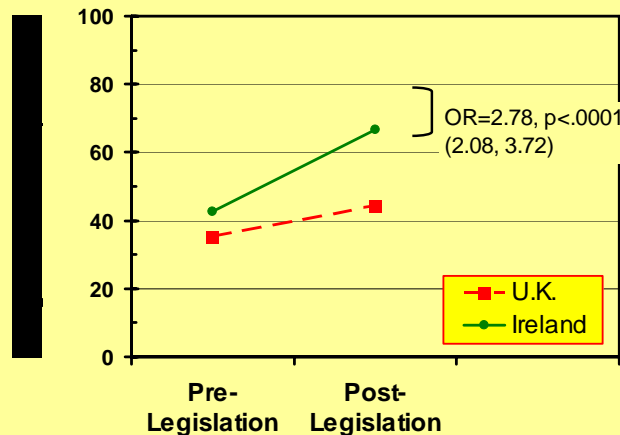
## Support for Total Ban in Restaurants



## Support for Total Ban in Bars/Pubs



## Support for Total Ban in Workplaces



# Indoor Air Monitoring



Welcome to Tobacco Free Air

<http://tobaccofreeair.com/index.htm>

## TobaccoFreeAir.com

Training and resources for a smokefree world

[Take the course](#)  
Request support for  
smokefree efforts  
[Smokefree links](#)

[Tools and Downloads](#)

[Take the Air Monitoring Course](#)

[Clean Air News](#)

Welcome to TobaccoFreeAir.com

### Learn how to perform air monitor testing

Valid air monitoring has proved to have a profound effect on the creation, education and publicity around smoke-free policy initiatives.

This online course will help researchers who have been provided an SidePak air monitor through the Roswell Park cancer Institute to run air monitoring research in their country.

This online course will demonstrate how to:

[Setup and calibrate](#)

[Operate and take measurements](#)

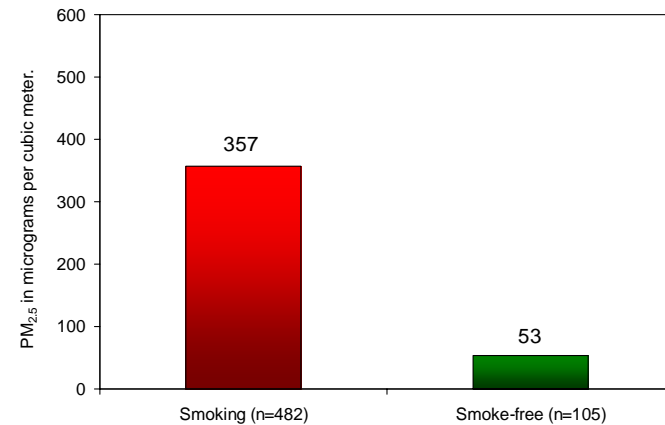
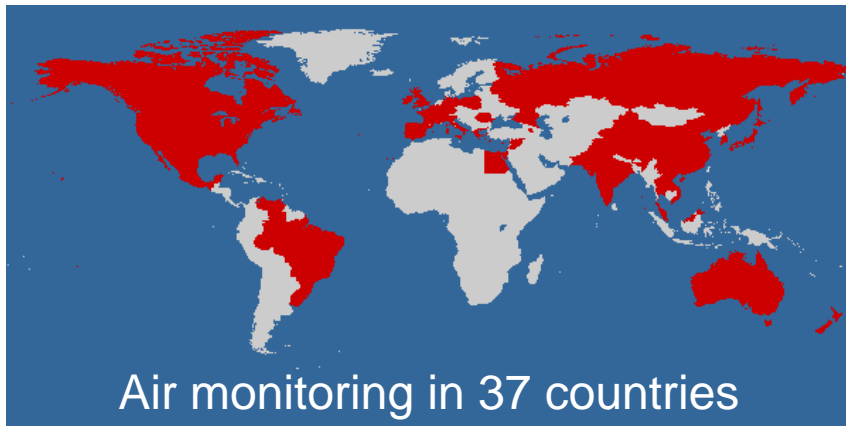
[Download and access data](#)



[Take the course](#)

As part of this study you are required to email your data files and observational notes to [Roswell Park](#), for additional analysis.

You will also have an opportunity to provide feedback regarding Air Monitor course. [We look forward to your comments.](#)



# An example from our International tobacco product repository



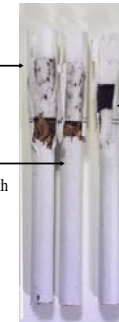
“Safe” cigs from China and the USA??

## Marlboro UltraSmooth

Marlboro  
Ultra Light  
N. Dakota

Marlboro  
Ultra Smooth  
Atlanta

Marlboro  
Ultra Smooth  
Salt Lake City



# European Commission, 2004

## 10-1-10 policy

### Questions:

1. Did the companies comply with the law?
2. Were the cigarettes less toxic?

### Methods:

- Compared yields and design features of 10 cigarette brands sold in the United Kingdom (UK) before (1999) and after (2005) the EC standard was implemented.

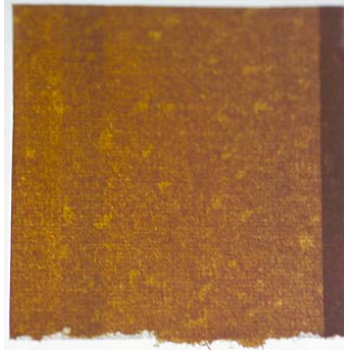


O'Connor RJ, et al,  
How did UK cigarette makers  
get their brands to 10 mg. "tar"  
or less? BMJ; 2006;332:302.

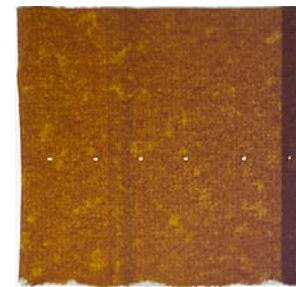
479% increase in filter ventilation



Berkeley Super Kings 1999



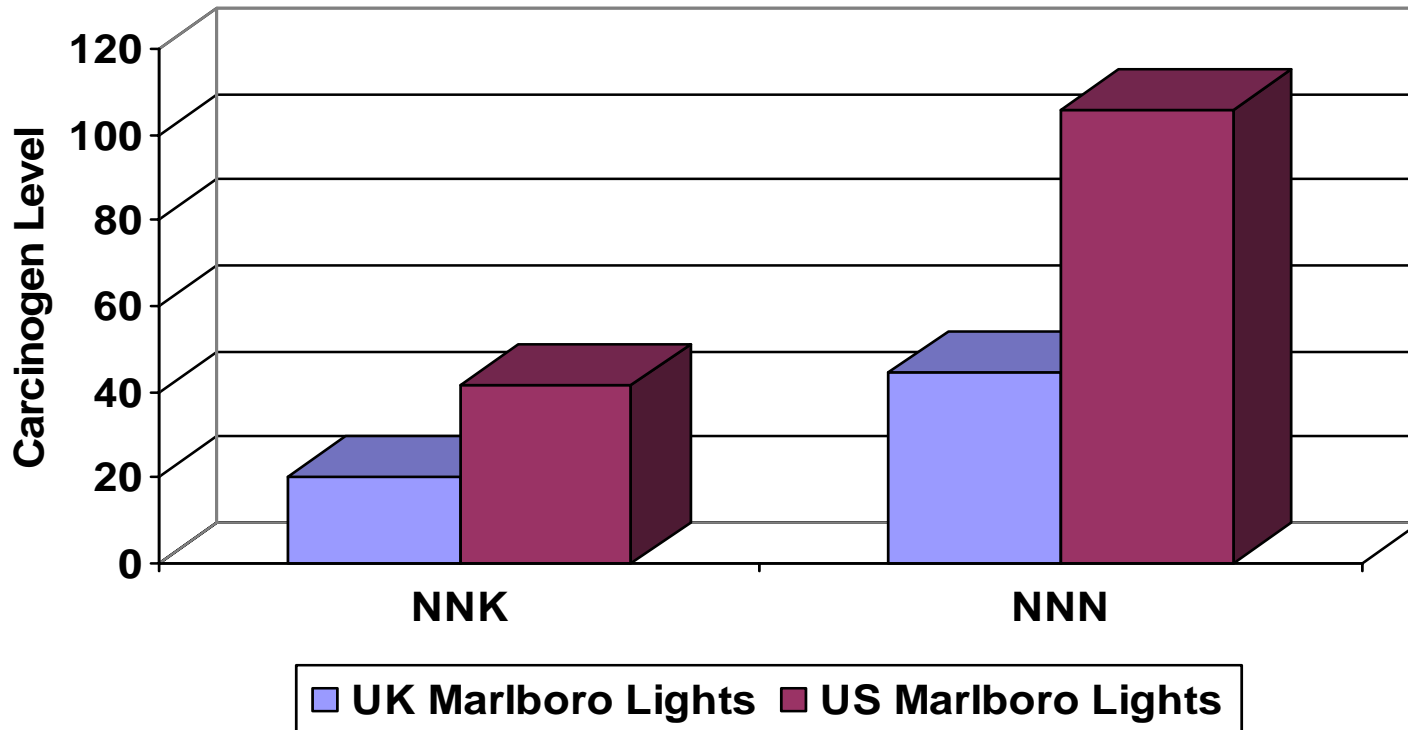
Berkeley Super Kings 2005



Manufacturers complied with the EC's mandated yield reduction by increasing filter ventilation levels on cigarettes—a design feature that promotes compensatory smoking.

# Super-Sized Carcinogens

A recent laboratory study shows levels of NNK, a potent lung carcinogen, are 108% higher in the U.S. version of Marlboro Light than the British version. Levels of NNN, another lung carcinogen, are 138% higher.





# Summary of findings

[http://tc.bmjournals.com/content/vol15/suppl\\_3/](http://tc.bmjournals.com/content/vol15/suppl_3/)

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## Warnings

- ◆ Increasing warning label size makes the warning more salient and noticeable for smokers.
- ◆ Graphic warning labels appear to have a greater impact than text only labels.

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## Smoke-free

- ◆ Smokers adjust to smoking bans and do not shift their smoking behavior to their homes.
- ◆ Smoking bans promote quitting behavior.

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## Marketing

- ◆ UK's comprehensive advertising ban significantly reduced smokers' exposure to pro-tobacco marketing and messages.
- ◆ Introducing controls on labeling reduced smokers' misperceptions of light and mild cigarettes.

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## Product regulation

- ◆ The EC 10-1-10 policy has not made cigarettes safer.
- ◆ The level of tobacco-specific nitrosamines (a potent carcinogen) found in the smoke of leading cigarette brands varied widely across countries.

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## Tax & price

- ◆ Tax avoidance varies considerably across countries.
  - ◆ The use of low and untaxed source of cigarettes is associated with a lower likelihood of quitting smoking.
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