**Faculty of Public Health**

**of the Royal Colleges of Physicians of the United Kingdom**

**Working to improve the public's health**

# Tobacco Smoke Pollution & Health

*Briefing Statement*

## Introduction

Tobacco smoke pollution, also called second-hand smoke, passive smoking, or environmental tobacco smoke (ETS), refers to exposure to 'sidestream' smoke (released from the burning tip of a cigarette) and 'mainstream' smoke (smoke inhaled and then exhaled by a smoker).[1] It can cause premature death, admission to hospital and provokes symptoms in susceptible individuals.

Tobacco smoke pollution contributes to inequalities in health – people on low incomes, people experiencing poverty or social exclusion and who live in disadvantaged communities are more likely to be exposed to others' tobacco smoke at home and at work.

Whilst exposure to other toxins is regulated by law, there is no mandatory right to protection from tobacco smoke pollution in the UK. The Health & Safety at Work Act (1974) implies that employers have a duty to control smoking in the workplace, but this is not explicit, and no actions have been brought under the Act. Evidence from other countries shows that primary legislation is the most effective means of reducing tobacco smoke pollution.

## Policy context

There are a great many policy documents which both directly and indirectly address the issue of tobacco smoke pollution. Key documents include:

**UK:** *Smoking Kills - A White Paper on Tobacco* (1998) stated that, although smoke-free workplaces were the ideal, a universal ban on smoking in public places was not justified, and encouraged greater provision for non-smokers by co-operation with industry and others.[2]

In 1999 the Health and Safety Commission produced a consultation paper on smoking in workplaces – the draft *Approved Code of Practice* (ACoP).[3] Despite submission for ministerial approval in September 2000, no decision on this has yet been made by the Government.

The current national consultation – *The Big Conversation* – on the big challenges facing Britain includes the question: "Should local authorities have new powers to introduce smoking bans at work and in public places?"[4]

The Government has negotiated a voluntary Public Places Charter with the hospitality industry. The Charter aims to 'encourage' increased provision for non-smokers and improve air quality.[5] Premises are required to display signage showing which of the five smoking policy options they operate. Premises are charter compliant even if they allow smoking throughout, provided there is a sign outside to that effect.

**England and Wales:** A private members bill, *Tobacco Smoking (Public Places and Workplaces) Bill,* which aims to limit smoking in enclosed public places (including workplaces), except in a designated smoking area, was launched by Lord Faulkner of Worcester.[6] It is currently at committee stage at the House of Lords.

**England:** *Choosing Health? A consultation on action to improve people's health* will lead to a White Paper on Public Health. It acknowledges that "smoke-free places are the ideal way of protecting people from the dangers of second-hand smoke".[7] The White Paper is due for publication autumn 2004.

The Chief Medical Officer's 2002 annual report *On the State of Public Health* called for employers to introduce smoke-free workplaces. It also highlighted the need for increased knowledge amongst health professionals and for regional directors of public health to act as "local champions of change" on second-hand smoke.[8]

*Securing Good Health for the Whole Population* by Derek Wanless states that the "voluntary approach to smoking in the workplace has had limited success". A review of studies on the impact of smoke-free policies on hospitality businesses showed there was "no impact or a positive impact … on sales or employment".[9]

**Scotland:** the *Prohibition of Smoking in Regulated Areas (Scotland) Bill* aims to prohibit smoking in 'regulated' areas (such as those where food is served/consumed).[10] It is currently at Stage 1 (evidence stage) and is due to report by November 2004.

This follows on from *A Breath of Fresh Air for Scotland* – the Scottish Executive's action plan on tobacco control, including second-hand smoke. It encourages all employers (including health organisations) to take up and support "effective smoking policies".[11]

NHS Scotland, Ash Scotland and the Convention of Scottish Local Authorities have produced *Tobacco at Work: Guidelines for Local Authorities.* This outlines steps local authorities can take to develop and implement a workplace policy on tobacco.[12]

The Chief Medical Officer, in his annual report *Health in Scotland 2003,* dedicated a chapter to the effects of smoking (including passive smoking) and its effects on Scotland's health, and detailed the key publications and initiatives to reduce smoking.[13]

**Wales:** the Welsh Assembly Government, last year, voted to ask for primary enabling legislation to ban smoking in enclosed public places. To date, this is still being debated.

A private members bill, *Smoking in Public Places (Wales) Bill,* which aims to prohibit smoking in public places in Wales, was launched by Baroness Finlay of Llandaff.[14] It has so far reached a third reading at the House of Lords.

**Northern Ireland:** currently, the policy position is based on England. However, *A Five Year Tobacco Action Plan 2003-2008* devotes a chapter to "Protecting non-smokers from tobacco smoke". It states that the views of those who do not smoke must take precedence over those people who do, and a key action point is the finalisation of the *Approved Code of Practice on Passive Smoking at Work,* as well as the further commissioning of research on public attitudes to smoke-free facilities, and working with key organisations on promoting policies for smoke-free workplaces.[15]

**International:** the UK has signed up to the World Health Organization's (WHO) *Framework Convention on Tobacco Control.* A key element of this is to protect people from exposure to tobacco smoke – which it states is a "real and significant threat to public health".[16] Those signed up to the Treaty agree to adopt and implement or promote effective measures to protect against exposure from tobacco smoke in a variety of public places, including the workplace.

## Smoke-free places

**Many countries, US states and cities have legislated to protect individuals from tobacco smoke pollution, including:**

- **Republic of Ireland**
- **Norway**
- **Thailand**
- **Canada**
- **New Zealand**
- **Sweden**
- **Australia**
- **Iceland**
- **US States: California and New York**

**Some UK cities are exploring local options for smoke-free policies. Although limited at present, this may change if local authorities take over licensing duties from magistrates, and if permissive legislation is brought in allowing them to introduce bye-laws on smoke-free places.**

**Faculty of Public Health:** is active in highlighting the harmful effects of smoking and tobacco smoke pollution, and works in partnership to advocate for smoke-free places. It works with other organisations, particularly ASH and the Royal College of Physicians (RCP) on tobacco issues. It is a member of the Clear the Air Coalition (see: www.ash.org.uk) and was a signatory on the letter to *The Times* calling for government to legislate on smoke-free places. The Faculty also supports calls for a Tobacco Regulatory Authority (a recommendation made by the House of Common Health Select Committee and the RCP), and facilitates an electronic discussion group on tobacco which provides a virtual forum for those who wish to network with others on tobacco issues (see: Network Groups at www.fph.org.uk). This briefing statement forms part of the Faculty's strategy to highlight the need for action to tackle tobacco smoke pollution.

**Exposure to other people's cigarette smoke**

- **increases the risk of an acute coronary heart disease event by 25-35%;[18]**
- **increases the risk of lung cancer by 20-30%;[17]**
- **significantly increases the risk of stroke;[19]**
- **decreases lung function – those exposed to the highest levels of ETS lose over a quarter of a litre of lung function;[20]**
- **affects the body's ability to take in and use oxygen, and places extra stress on the heart;**
- **can cause asthma and trigger asthma attacks;**
- **increases the risk of harm to children and babies, including asthma, lung infections and middle ear disease;**
- **causes one in two cases of sudden infant death syndrome (SIDS or cot death);**
- **can lead to low birth-weight babies and premature birth.**

## Evidence

There is clear evidence that tobacco smoke pollution (inhaling second-hand tobacco smoke; passive or involuntary smoking) is directly harmful to health. At least 1,000 people die each year as a direct result of inhaling second-hand smoke.[8,17] Tobacco smoke pollution is classified by the American Environment Protection Agency as a Class A carcinogen (a status afforded to only 15 other pollutants, including asbestos, radon, and benzene). It has been recognised by a UK Scientific Committee as being hazardous to health.[17] The World Health Organization (WHO) International Agency for Research on Cancer (IARC) also classified it as a carcinogen in 2002.[18]

As a result of exposure to tobacco smoke pollution, around 17,000 children under five years of age are admitted to hospital each year nationally, at a cost of £400m to the NHS.[21] The severity of the health impact on children of exposure to tobacco smoke pollution has led WHO to call for the right of every child to grow up in an environment free of tobacco smoke pollution. Smoking in public places also helps to maintain the social acceptability of smoking and makes it harder for smokers to quit.

People on low incomes, in small businesses and in the hospitality industry are at greater risk.[22,23] A US study showed hospitality workers had a 50% higher risk of lung cancer than the general population — after controlling for active smoking.[24]

Exposure to other people's tobacco smoke means being exposed to at least 50 different agents known to cause cancer, such as benzo(a)pyrene, formaldehyde and 4-aminobiphenyl. Tobacco smoke also contains five regulated hazard pollutants, 47 regulated hazardous wastes and over 100 chemical poisons. No safe level of exposure has been established for many of these.[25] Other chemicals in the smoke are known to raise blood pressure, damage the lungs and cause abnormal kidney function.[8] As approximately 85% of second-hand smoke is in the form of invisible, odourless gases, people underestimate their level of exposure.

## Epidemiological trends

- The voluntary approach to protecting people from the dangers of tobacco smoke pollution is not working. Currently, only half of all workplaces are smoke-free — around three million people in the UK are still exposed to tobacco smoke pollution in the workplace.[8] This includes workers in the hospitality, casino, betting and bingo sectors.
- A 2003 audit of the voluntary Public Places Charter in Scotland found, almost three years since it was created, that of the businesses responding to the survey:
  - two thirds agreed that non-smoking should be the norm in public places;
  - only 15% complied with all key aspects of the charter;
  - 23% of those that responded from the Food & Industry sector thought they were compliant with the charter when in fact only 11% actually were.[26]
- Research among non-smoking bar staff in London pubs in 2001 measured cotinine, an accurate indicator of exposure to tobacco smoke pollution. Cotinine levels for these workers were three to four times greater than the average in

non-smokers with smoking partners.[27] Similar studies in New Zealand have also shown worrying effects of exposure to tobacco smoke pollution among workers.[28]

- There is no safe level of exposure to tobacco smoke pollution. Ventilation systems do not reduce the significant health risks associated with passive smoking. Nor are ventilation and separation effective in protecting people from the toxic and cancer-causing chemicals in tobacco smoke.[29] Only particles (15% of ETS) are trapped by filters. Ventilation sufficient to remove the remaining 85% requires unachievably high volume exchange rates that are not energy efficient.
- More than 80% of UK citizens, including smokers, support smoke-free policies in public places.[30]
- 42% of British children live in a household where at least one person smokes.[31] These children are more likely to smoke as adults. 10% of 11-15 year olds are regular smokers. Children from socio-economic households in social class IV and V are more likely to be exposed to tobacco smoke than from social class I.[32,33]

## Additional benefits of smoke-free workplaces

### Smoke-free workplaces can increase profits by:

- eliminating the risk of legal action against employers who fail to protect their employees from second-hand smoke. ASH (including ASH Scotland) have written to all leading hospitality employers highlighting the dangers of potential legal action against them by employees should they continue to permit smoking in the workplace;
- reducing cleaning costs, wear and tear on furniture and equipment, and chances of fire, with all their attendant costs.

### Health benefits of smoke-free workplaces

- **smoke-free workplaces help to protect people from the dangers of tobacco smoke pollution;[34]**
- **making workplaces smoke-free is an effective smoking cessation strategy. If comprehensive smoke-free policies in workplaces were introduced, it is estimated that the prevalence of smoking would fall from 27% to 23%;[8]**
- **smoke-free workplaces reduce sickness and absentee rates;[35]**
- **smoke-free public places contribute to denormalising smoking, aiding maintenance of non-smoking among recent ex-smokers and exposing children to fewer smoking role models.**

Going smoke-free would, at worst, be economically neutral for the hospitality industry. It may even represent an economic opportunity for that industry, as the majority of people in the UK are non-smokers. Since it acquired smoke-free policies in public places, New York has seen increases in employment in the hospitality sector. A survey of hospitality establishments in the north of England (including pubs and bars) that were either totally smoke-free (57%) or provided separate smoking areas found that smoke-free polices were popular and that trade had generally increased as a result of the policy.[36]

## Recommendations

As well as engaging in national debates about smoke-free public places, there is a great deal which can be done at a local level in partnership with local authorities, community groups and other stakeholder organisations. Public health specialists, particularly directors of public health, are ideally situated to stimulate local debate and initiatives to tackle tobacco smoke pollution:

- undertake a survey of local opinion to demonstrate public support, including members of the public, businesses, health organisations;
- provide the evidence-base for public health programmes for action on smoking at local level;
- advocate for local NHS, health organisations and local authorities to become smoke-free role models (including the prohibiting of smoking outside premises);
- incorporate smoke-free policies into Healthy Workplace Plans;
- incorporate smoke-free policies into existing awards, such as Healthy Schools;
- use Local Strategic Partnerships to explore the possibility of enacting local bye-laws and/or using licensing regulations to require institution of smoke-free policies by local businesses;
- develop local smoke-free guides, awards and websites;
- smoke-free workplaces can encourage cessation attempts – ensure organisations going smoke-free are linked to local specialist cessation services;
- create and publicise toolkits to support implementation of smoke-free policies, available as online resources or publications;
- run media campaigns to generate publicity;[37]
- widen the local advocacy approach which can include: working with victims of occupational tobacco smoke exposure as advocates, targeting key decision makers, using credible opinion leaders.

**Tips**

- **Language is important in framing how people perceive the issue of tobacco smoke pollution. Portray exposure to others' tobacco smoke in a negative light by using the word 'pollution'. Always use a positive term like 'smoke-free' rather than a negative term like 'ban'.**
- **Enlist the support of local smoking cessation services.**
- **This issue is about *smoking* — and where it occurs — not about *smokers*.**
- **Be aware of organisations which may be tobacco industry funded, such as AIR.**

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## Useful organisations

**ASH (Action on Smoking and Health)**
w: www.ash.org.uk
e: enquiries@ash.org.uk
t: 020 7739 5902

**ASH Scotland**
w: www.ashscotland.org.uk
e: ashscotland@ashscotland.org.uk
t: 0131 225 4725

**Asthma UK**
(previously National Asthma Campaign – includes links to Asthma Scotland)
w: www.asthma.org.uk
t: 020 7226 2260

**British Medical Association Tobacco Control Resource Centre**
w: www.tobaccofactfile.org

**British Heart Foundation**
(has UK-wide links)
w: www.bhf.org.uk

**National Heart Forum**
w: www.heartforum.org.uk
t: 020 7915 5000

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## Summary

**This briefing gives an overview of the evidence on the effects of tobacco smoke pollution on health and outlines the health benefits of a smoke-free workplace, as well as making recommendations for action that can be taken at a local level. It is not intended as an exhaustive resource but as a signpost to key evidence, publications and organisations as a next step to understanding and tackling this important public health issue.**