



Briefing for the Public Petitions Committee

Petition Number: [PE01451](#)

Main Petitioner: Belinda Cunnison

Subject: Review of smoking ban

Calls on the Parliament to urge the Scottish Government to review the smoking prohibition and control provisions of the Smoking, Health and Social Care (Scotland) Act 2005 in the light of new developments in clean air technology and the European indoor air quality standard Ventilation for non-residential buildings, EN 13779.

BACKGROUND

Reflecting on air quality in general, new developments in clean air technology and European indoor air quality standards, the petitioner contends that the Scottish Government should review the ban on smoking, which came into force on 1 April 2006. The petitioner notes that the smoking ban was predicated on the view that there is no safe level of passive smoking¹. The petitioner challenges this, contends that there are other harmful toxins which people can be exposed to, and that eradicating smoking in indoor areas does not offer protection against bad indoor air.

This briefing provides background information on the key issues presented by the petitioner. It should in no way be seen as providing a systematic review of any scientific evidence that exists in this area; rather it seeks only to outline the evidence often referred to as part of the debate on these issues.

Indoor Air Quality

The UK Parliament's Parliamentary Office of Science and Technology (POST) published a POST Note on '[Indoor Air Quality](#)' in November 2010. It summarised the main indoor pollutants, the sources of these and the potential health impacts (see Appendix 1). It found that the legislation and policy framework related to outdoor air quality has overshadowed the issue of indoor air quality. It also found there to be no single government department directing policy in this area, a point similar to that made by the UK Health

¹ Other names for this often used include "secondary smoke", "environmental second hand smoke" and "environmental tobacco smoke".

Protection Agency in 2009, which stated that there was a “lack of coordinated action to improve indoor air quality”².

The POST Note also found there was a need for greater information and research, not only about the levels of exposure to indoor air pollutants, but also on the risks posed by long-term exposure.

European Standard EN-13779

The European indoor air quality standard on ventilation for non-residential buildings ([EN 13779](#)) is intended to prevent health problems caused by air pollution affecting non-residential buildings. The aim of this standard is to making indoor air healthier and more comfortable with air purification systems requiring low investment and low running costs. Since its publication, this standard has been ratified in all European countries.³

European standards (EN) are developed by the European Committee for Standardisation (CEN). The development of ENs is usually carried out by a committee of experts from industry and academia that represent the interests of Member States. It would be for the British Standards Institute (BSI) – as the UK’s National Standards Body – to represent the UK interests in relation to European standards.

As far as can be established, based on communication with the Scottish Government and the British Standards Institute (BSI), this European standard – now a British Standard: BS EN 13779) – does not have associated regulations or guidance. In short, this means that this is not a mandatory standard that must be complied with to meet regulatory building standards. Rather it is a non-mandatory standard that BSI would encourage builders to meet in order to promote best practice.⁴

Debate over the evidence on passive smoking

Evidence that passive smoking causes ill health

Proponents of the smoking ban refer to a very large range of studies in this area e.g. see ASH Scotland’s website [here](#). Outlined below are several of the key systematic review studies that are often referred to.

Internationally, one of the most recognised is the [study](#) published by the World Health Organisation (WHO) and the International Agency for Research on Cancer (IARC) in 2002, which reviewed the existing evidence at that time. It concluded there was sufficient evidence to state that passive smoking causes lung cancer in humans, and for it to make the overall conclusion that passive smoking is carcinogenic to humans. More recently, IARC (2010) published a [paper](#) which took into account further data and studies, which backed up these findings and others.

² [‘A Children’s Environment and Health Strategy for the UK’](#) (p 27)

³ See this [website](#) for information.

⁴ Personal communication with BSI – the British Standards company promoting best practice.

At a UK level, reference is often made to the work of the UK Scientific Committee on Tobacco and Health. It published its first [report](#) in 1998, which found that passive smoking was a cause of lung cancer, ischaemic heart disease, respiratory illness and asthmatic attacks. In 2004, it published an [update report](#), taking account of additional evidence published since 1998, and concluded that this had strengthened earlier estimates of the size of the health risk.

In the run-up to the introduction of the then Smoking, Health and Social Care (Scotland) Bill in 2004, a number of studies were commissioned by NHS Health Scotland into the possible impact of regulating smoking in public places. One [review](#) (University of Aberdeen, 2005), considered the existing international evidence concerning the health and economic impact of such regulation. It found there was substantial evidence of a causal link between passive smoking and lung cancer and coronary heart disease (para 3.7), though called for further research to strengthen the evidence base in areas such as stroke and respiratory disease (para 10.1). Another [study](#) (University of Glasgow, 2005) considered the number of deaths caused by passive smoking. It considered the causes of death most commonly associated with smoking (i.e. lung cancer, ischaemic heart disease, stroke and respiratory disease), and estimated that passive smoking was associated with 865 deaths per year in Scotland from these causes.

Arguments on the limitations of passive smoking research

There are a number of organisations, groups and individuals that dispute the extent and seriousness of the link between passive smoking and ill-health.

One argument, discussed by both the Tobacco Manufacturers' Association (TMA) and the campaign organisation Forest⁵, is that the environmental tobacco smoke (ETS) exhaled by a smoker is diluted in the ambient air. In its [submission](#) to the then Scottish Executive consultation on smoking in public places, TMA (2004) discussed research which showed that a large number of substances that exist in indoor ambient air and that the types of substance found in indoor air were generally similar, irrespective of the presence of tobacco smoke. It argued that the ETS mixes with the ambient air, is diluted and its constituents change over time and according to environmental conditions. Thus, there are important differences between the level, chemical and physical conditions of the smoke by the time it is inhaled by another person.

However, the key argument proposed by those who are sceptical of the evidence put forward to justify the smoking ban is articulated by the TMA: "...the scientific evidence available on environmental tobacco smoke causing serious diseases in non-smokers is, when taken as a whole, inconclusive"⁶. In its submission to the Scottish Executive (2004, p 2-3) it points to the findings of passive smoking epidemiological studies as being inconclusive and inconsistent. Where an elevated level of relative risk has been reported, TMA

⁵ <http://www.forestonline.org/info/passive-smoking/>

⁶ <http://www.the-tma.org.uk/policy-legislation/smoking-in-public-places-sipps/>

argues it is of a very low order and could be accounted for by bias or inadequate statistical adjustment. Essentially, it believes that the majority of studies do not meet the crucial test of statistical significance. In addition, reviews which use meta-analysis are deemed unreliable by TMA as, it argues, they compare studies which do not share a similar design or methodology. It also contends that that interpretation of systematic reviews is as prone to errors as the interpretation of data in individual studies, and that in both cases interpretations offer subjective, not objective, judgements.

The campaign group Forest on its [‘Passive Smoking’](#) webpage includes a number of other reports and studies, which it refers to when making its case on the issue.

Debate over the evidence on ventilation

One of the alternatives suggested to imposing a smoking ban in public places is the installation of ventilation systems. Ventilation is the dilution or displacement of unwanted indoor air constituents, including smoke or odours, with fresh outdoor air.

The basic argument given against ventilation is that second-hand smoke contains 4,000 chemical compounds of which at least 250 are known to be toxic or carcinogenic, and that ventilation cannot remove all of these, leaving substantial amounts in the air⁷. In its [submission](#) to the then Scottish Executive’s consultation in 2004, ASH Scotland, presented details of research which led it to conclude that ventilation could not be accepted as a solution to the risks associated with exposure to ETS. This included the findings from a study⁸ of pubs in Ireland, which found that 13 out of 14 bar ventilation systems studied were unable to maintain environmental tobacco smoke at low levels, and that, in two world record breaking levels of CO were found.

However, in the background information to the petition, the petitioner presents the case that implementation of Standard EN13379, together with what they believe is evidence that ventilation is improving, justifies a review of the smoking ban. At the time of scrutiny of the then Bill, research referred to by proponents of ventilation included that by researchers from the University of Glamorgan, who found that ventilation was effective in controlling levels of contamination⁹. Those who support the use of ventilation systems also use the wider argument that identifying and measuring the components of ETS and assessing the exposure of non-smokers to them in real-life situations, present very great difficulties. TMA (2004, p 8) stated that various substances that make up ETS are generally only present in extremely low concentrations, some below any meaningful measurement. It contended that some of these are likely to be present in the air anyway, emanating from other sources and inseparable from the ETS contribution.

⁷ For example, see ASH Scotland [‘What is second-hand smoke’](#)

⁸ See [here](#) for a copy of the abstract.

⁹ It has not been possible to access the research, but it and its findings are referred to in House of Commons Health Select Committee (2005) [‘Health – First Report’](#) (para 27-28)

SCOTTISH GOVERNMENT ACTION

The Scottish Government has advised that it has no plans to review the smoking ban legislation and is committed to developing a new tobacco control strategy. It also noted that the UK (including Scotland) is signed up to the WHO [Framework Convention on Tobacco Control](#), Article 8 of which makes recommendations for protection from exposure to second hand smoke. It also stated that any amendments that would allow smoking in public places again would be highly criticised from a health point of view and undoubtedly seen as a backwards step that goes against its actions to denormalise smoking.¹⁰

The Scottish Government commissioned a national evaluation of the smoking ban legislation. A [summary](#) of the evaluation was published in January 2010. Amongst its findings included:

- an 89 per cent reduction in second hand smoke exposure in bar workers
- a 39 per cent reduction in SHS exposure in adults and 11-year old children
- a 17 per cent reduction in hospital admissions for acute coronary syndrome
- some evidence of social isolation among older male smokers who no longer frequented pubs following the smoking ban

SCOTTISH PARLIAMENT ACTION

Since the passing of the smoking ban legislation, there have been no debates in Parliament concerning the issues raised by the petitioner or on the ban itself.

In the third session of Parliament there were two petitions lodged with the Public Petitions Committee:

- [PE1037](#) calling for the Scottish Parliament to amend the Smoking, Health and Social Care (Scotland) Act 2005 to allow smoking in pubs and clubs within designated smoking areas
- [PE1042](#) calling for the Scottish Parliament to review the smoking prohibition and control provisions of the Smoking, Health and Social Care (Scotland) Act 2005, and to adopt a comprehensive approach to indoor air pollution by introducing a Regulated Indoor Air Quality Standard.

Both petitions were referred to the Health and Sport Committee which, on 1 October 2008, decided to close the petitions on the grounds that they would be taken into account during any post-legislative scrutiny of the Smoking, Health and Social Care (Scotland) Act 2005. The Committee did not undertake an inquiry into this area.

¹⁰ Personal communication 22 November 2012

SPICe research specialists are not able to discuss the content of petition briefings with petitioners or other members of the public. However if you have any comments on any petition briefing you can email us at spice@scottish.parliament.uk

Every effort is made to ensure that the information contained in petition briefings is correct at the time of publication. Readers should be aware however that these briefings are not necessarily updated or otherwise amended to reflect subsequent changes.

Appendix 1: Indoor air pollutants, sources and health impacts

Pollutant	Sources	Health Impacts
nitrogen dioxide (NO ₂)	heating and cooking appliances	associated with respiratory symptoms
carbon monoxide (CO)	heating and cooking appliances	lethal at high levels, potential chronic effects at low levels
particulate matter (PM)	cooking and aerosols	reduced lung function and increased risk of heart and respiratory disease
radon	ground gases especially in defined areas	lung cancer
environmental tobacco smoke (ETS)	cigarettes, cigars and pipes	lung cancer, chronic obstructive pulmonary disease, asthma and reduced lung function
allergens	moulds and house dust mites	worsening of symptoms of asthma; causation of wheezing
volatile organic compounds and ozone	cleaning products, paints and printers	respiratory tract irritation, possible effects on asthmatics

Source: POST (2010) [‘Indoor Air Quality’](#)