

Tobacco smoke drift at home

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Key points:

- exposure to tobacco smoke drift in the home is a serious nuisance and may cause health problems
- the Scottish smoke-free legislation does not cover homes (except where they are also workplaces), common stairs (except where work is undertaken on the premises), landings, doorways or outside spaces
- local authority environmental health officers have a duty to investigate but smoke drift is very resource-intensive to prove
- smoke drift can be reduced but not eliminated
- maintaining good relations with neighbours is the best way of working towards a solution.

This briefing is for those affected by other people's tobacco smoke in their home environment. It aims to raise awareness of just how serious a nuisance smoke drift can be and outline the possible options for reducing it.

Introduction

Scotland's smoke-free legislation came into force in March 2006, drastically reducing exposure to second-hand smoke in enclosed public places¹ and gathering widespread support². The proportion of people in Scotland who do not allow smoking anywhere inside their home has risen from 43% in 2009³, to 56% in 2011⁴ which may account for an apparent increase in smoking outside and on landings, stairwells, in doorways and around other communal areas. Opponents of the ban predicted that smoke exposure would be shifted into the home but this has not been the case⁵; in fact research suggests that smoke-free legislation may stimulate smokers to establish total smoking bans in their homes⁶. However, reduced public exposure means that non-smokers are likely to have become more sensitive to the smell of tobacco smoke within enclosed spaces, including communal areas and their own homes. There is a growing body of evidence

that second-hand smoke can seep into homes from communal areas and adjacent homes^{7 8 9}.

ASH Scotland receives many enquiries from non-smokers exposed to indirect smoke drift in their own homes. Parents with young children and those who are housebound are especially vulnerable, and feeling powerless to prevent unwanted exposure in a place where you should feel safe adds an additional stress. Children are more vulnerable to the effects of second-hand smoke than adults because of their smaller size, less developed immune systems and faster breathing rates¹⁰. Exposure to smoke from other people's tobacco in your own home can be as much of an intrusion as persistent loud noise or other anti-social behaviour and deserves to be treated as seriously.

What is smoke drift?

Smoke drift is indirect second-hand smoke exposure to other people's cigarette, pipe or cigar and tobacco smoking which enters adjacent homes, as opposed to direct second-hand smoke exposure from being close to a smoker. Smoke can drift wherever there is room for air to move and need not be visible to be a health risk. It can circulate between properties via door and window joinery, through floors and under skirting boards, lighting fixtures, cracks and gaps in walls, along ducts made for pipes and wiring, through mechanical ventilation and air conditioning systems, from landings and stairways, external doorways, balconies and other outdoor spaces.

Can smoke drift be prevented?

Where areas of smoke drift penetration can be identified it may be possible to have them blocked although this may simply divert the smoke. If it can be established that a vent is directing smoke drift from one property to another, it should be moved to vent externally. However, whilst there are measures which can reduce smoke transfer, research suggests that it is virtually impossible to eliminate it completely¹¹. According to the American Society of Heating, Refrigerating and Air-Conditioning Engineers 'the only means of effectively eliminating health risk associated with indoor exposure is to ban smoking activity'¹².

Can smoke drift be measured?

There are machines called particle monitors which can pick up other

sources of PM2.5 (small airborne particles, one marker for tobacco smoke) that are similar to second-hand smoke drift. Unfortunately, activities such as cooking can create as much particulate matter as cigarettes can, and it is not possible to distinguish between the two when monitoring an adjacent property. Researchers in America are already using passive nicotine monitors as a way of measuring indirect smoke drift¹³.

Is exposure to smoke drift a health hazard?

Direct exposure to second-hand (SHS, passive smoking, or environmental tobacco smoke) carries many of the same health risks as active smoking¹⁴. Whilst less is known about indirect exposure to second-hand smoke, tobacco smoke is a toxic substance with no safe level of exposure although the risks from exposure are largely dose-related^{15 16}. Even low levels of exposure may cause irritation to eyes and lungs, nausea and headaches as well as creating an unpleasant smell. The 2006 report from the US Surgeon General concluded that 'second-hand smoke is not a mere annoyance. It is a serious health hazard that leads to disease and premature death in children and non-smoking adults'¹⁷.

The health effects of breathing second-hand tobacco smoke are well established¹⁸ and there are particular risks during pregnancy¹⁹, to young children²⁰, and to people with various medical conditions^{21 22}. The effects of breathing tobacco smoke can occur even during brief periods of exposure²³.

Inhaling second-hand smoke can cause cancer in non-smokers and many of the cancer-causing chemicals are present in higher concentrations than in the smoke inhaled by the smoker themselves²⁴. Research²⁵ indicates that non-smokers' heart arteries show a reduced ability to dilate when exposed to tobacco smoke, diminishing the ability of the heart to get blood. In addition, the same half hour of second-hand smoke exposure activates blood platelets, which can initiate the process of atherosclerosis (blockage of the heart's arteries) that can lead to heart attacks. These effects may explain other research showing that non-smokers regularly exposed to SHS suffer death or disease rates 30% higher than those of unexposed non-smokers²⁶. For more information visit: www.ashscotland.org.uk/shs

Smokers' materials

Smokers' materials (i.e. cigarettes, cigars or pipe tobacco) were the most frequent source of ignition causing accidental dwelling fire deaths,

accounting for 102 deaths and 1,047 non-fatal casualties, which is over a third of all accidental dwelling fire deaths in the UK in 2007. In Scotland, smoking as a cause of accidental dwelling fires, is attributed to fewer than 8% of incidents but when a fire death occurs the figure rises to 41%²⁷.

Smoke drift from a workplace

Workplaces in Scotland are covered by smoke-free legislation. If the smoke drift is entering your home from a workplace then the law is being broken and you should speak first to the management and then to local authority environmental health officers (see useful contacts). If the smoke drift is entering your home from an outdoor smoking area designated by the employer then you should take a similar course of action.

The Smoking, Health and Social Care (Scotland) Act 2005 provides for four main offences: permitting others to smoke in no smoking premises; smoking in no smoking premises; failing to display warning notices in no smoking premises; and failing without reasonable cause, to give one's name, and address on request by an enforcement officer. The Act allows for an individual to discharge any liability to conviction by payment of a fixed penalty. It also provides for an authorised local authority officer to enforce the legislation and issue fixed penalty notices.

Smoke drift in common areas

Section four of the Smoking, Health and Social Care (Scotland) Act 2005²⁸ explains that what is meant by premises wholly or substantially enclosed includes those:

- to which the public or a section of the public has access
- which are being used wholly or mainly as a place of work
- which are being used by and for the purposes of a club or other unincorporated association; or
- which are being used wholly or mainly for the provision of education or of health or care services.

The reference to work includes work undertaken for no financial advantage.

Whereas the English smoke-free legislation extends to covered communal spaces such as landings and stairwells, the Scottish legislation does not. ASH Scotland receives many enquiries from people who are affected by smoke drift and tobacco litter from stairs and landings, as well as the noise

from groups of people gathering to smoke. This is unsurprising in a country where 38% of dwellings are flats, rising to 74% in Glasgow²⁹. Flat owners are legally bound to share and maintain a proportion of their buildings in combination with others and be mindful of a communal code.

First try speaking to the person whose smoke is affecting you (see box below). Also speak to your other neighbours as they may share your concerns and could offer support for making the communal areas smoke-free. You can put up no smoking signs (see useful contacts) or your own polite 'please don't smoke here' notices. If there are still problems and property is rented then contact the landlord, agent or housing association directly. If the property is privately owned then follow the process (see page 5) as for smoke drift entering from a private property.

Smoke drift from other homes

The smoke-free legislation does not extend to homes, be they rented or owned, unless those homes are also workplaces. If smoke drift from another person's home is a nuisance to you then it's best to make the smoker or smokers aware of this. If you can't arrive at an amicable solution with a property's tenants you may wish to involve the landlord and then the local authority environmental health department. Similarly, if you can't arrive at an amicable solution with a home owner then you may have to involve the local authority environmental health department. Legal advice should be the last resort.

Speaking to your neighbour about indirect smoke drift:

- before you approach your neighbour think carefully about how best to explain the problem and the way it affects you
- don't stray from the issue
- be friendly and try to approach the situation calmly and positively
- make it clear throughout that you are flexible and interested in working out a mutually satisfactory solution
- most people will want to do the right thing and may be genuinely surprised that their tobacco smoke is getting into your home
- few people realise what a serious problem indirect smoke drift can be so explain your concerns clearly and be prepared to

Smoke drift from privately owned or from rented homes:

- **from inside an adjacent private property.** If you are unable to resolve the situation by speaking to your neighbour it might be worth considering mediation (see contact details at the end of this document). A mediator is completely impartial and will try to see both sides of any dispute. They may be able to help both parties come to an agreement and stick to it. If this fails then consider contacting your local authority environmental health department (see 'Useful contacts' and section below). If all else fails you may wish to consider taking legal advice.
- **from inside an adjacent rental property.** Many private landlords now make it a condition of the lease that tenants must not smoke indoors. There are sound financial reasons for this for, as well as an increased fire risk, cigarette smoke may cause yellowing stains to build up on walls, ceilings and paintwork. Soft furnishings and carpets also may become stained from exposure to cigarette smoke as well as retaining the smell and being vulnerable to burns. The resale and re-letting value of a home may be reduced as smoke-staining and the smell of stale smoke could deter non-smokers. Research from America suggests that 'apartment turnover costs can be two to seven times greater when smoking is allowed compared to the cost of maintaining and turning over a smoke-free unit'³⁰. Making rental apartments smoke-free also reduces the landlord's exposure to legal action from residents seeking protection from exposure to indirect tobacco smoke. Always speak to the smoker or smokers before taking any other steps. If there is still a problem contact the landlord and try to rule out any obvious sources of smoke penetration such as incorrectly fitted vents. Try to find out from the landlord or estate agent if there is a no smoking condition in the lease. If there is not a no smoking clause ask the landlord or agent to consider adding one but make sure it extends to communal areas. If the property belongs to the local authority or a housing association find out if they have policies about nuisance or resolution of neighbour disputes. If smoke drift remains a nuisance contact your local authority environmental health department (see 'Useful contacts' near the end of this document).
- **houses of multiple occupation (HMO).** An HMO is a property that is shared by three or more tenants who aren't members of the same family. High levels of non-familial occupation may also mean high levels of smoke drift throughout a property, especially if tenants

are smoking in bedrooms as well as public rooms. HMO landlords must have a licence from the local authority so if you are affected by smoke drift from an adjacent HMO it might be worth checking first of all that the property is registered (see useful contacts) and then that the landlord is aware that the tenants smoke inside. Speak to the smoker or smokers first and if there is still a problem contact the landlord. Try to find out if not smoking is a condition of the lease; if there is not a no smoking clause ask the landlord to consider adding one but make sure it extends to communal areas. If smoke drift remains a nuisance contact your local authority environmental health department (see 'Useful contacts' near the end of this document).

Keeping a log of indirect smoke exposure

It's a good idea to keep a log of when and where the smoke incursion has taken place and it might even identify a pattern of exposure. Also keep copies of any correspondence you've had with neighbours, landlords or the local authority. Your log should answer these questions (adapted from ASH Australia's example):

1. Where is the smoke coming from and how is it entering? Include dates and times.
2. How is the smoke affecting you and your family? In what other ways is it affecting the use or enjoyment of your home?
3. What steps have you taken to protect yourself from the smoke - closing windows or doors, leaving the building, not using particular rooms etc?
4. What steps have you taken to raise the problem and with whom?

Involving your local authority environmental health department

Local authority environmental health services are responsible for identifying and dealing with statutory nuisance. Environmental Health Officers (EHOs) act as advisers, educators and enforcers, and carry out site visits and give assistance to individual householders and businesses and to managers and workers. In certain circumstances, they take enforcement action to ensure compliance with legislation designed to protect the health of the public.

Part 111 of the Environmental Protection Act 1990³¹ deals with statutory

nuisance but the law can only be applied when the Environmental Health Officer is satisfied that statutory nuisance exists, and it may be difficult to prove. However, an EHO should be able to offer advice and if nuisance can be proved they will take appropriate action to abate that nuisance. (see 'Useful contacts').

If you think more needs to be done...

Exposure to indirect smoke drift in your own home is both a nuisance and a potential health hazard. If you feel strongly about this issue you might like to lobby your elected representatives (see 'Useful contacts') to extend Scotland's smoke-free policies, support better public education and awareness raising about second-hand smoke, or tighten environmental health legislation so that people are better protected from indirect smoke drift in their own homes.

Smoke-free local authority and housing association homes

As of November 2011, 265 government-subsidised public housing authorities in the United States have already adopted smoke-free policies³² and many more are considering the benefits. As people learn more about the dangers of second-hand smoke the support and demand for smoke-free housing will continue to grow. Landings, lifts and stairwells of publicly subsidised housing are not protected in Scotland (they are in England) yet this measure alone could reduce exposure to second-hand smoke.

Useful contacts:

- **your environmental health department** - a complete list of Scottish local authorities is available at:
www.scotland.gov.uk/Topics/Government/local-government/localg/usefullinks
- **to check for valid HMO Licences visit**
www.landlordregistrationscotland.gov.uk
- **to find a mediator** contact the Scottish Mediation Network, 18 York Place, Edinburgh. EH1 3EP. Scottish Mediation Helpline: 0131 556 8118.
www.scottishmediation.org.uk/find-a-mediator
- **for no smoking signs and stickers:** www.gasp.org.uk
- **to find your nearest Citizens Advice Bureau:** www.cas.org.uk

- to get details of all your political representatives (MP, constituency MSP and regional list MSPs) type your postcode into this site: www.theyworkforyou.com

Information and resources:

- ASH Scotland information on second-hand smoke with statistics, links to briefing papers and the latest research can be found at: www.ashscotland.org.uk/shs
- **Smoke-free Housing BC**
A Canadian website with advice for residents, landlords and housing associations. See 'Tools and resources' section for sample petitions, surveys, complaint letters and resident exposure logs which could be adapted: www.smokefreehousingbc.ca/
- **Smoke-free Environments Law Project.** A US site which gives an overview of the benefits of smoke-free housing and how to achieve it:
www.tcsg.org/sfelp/home.htm
- From The Non-Smokers' Rights Association/Smoking and Health Action Foundation 'When neighbours smoke - Exposure to Drifting Second-hand Smoke in Multi-Unit Dwellings.' 2006. Available from: www.nsra-adnf.ca/cms/file/pdf/NSRA_DriftingSHS_Jan2007update.pdf

References

¹ National Evaluation of Scotland's smoke-free legislation – main findings, methodology and links to papers published to date at: www.ashscotland.org.uk/ash/5510 [Accessed 08.02.12]

² MRUK Omnibus Survey October 2006, main findings available at: <http://www.clearingtheairscotland.com/research/opinion-survey.html> [Accessed 08.02.12]

³ All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 1157 adults. Fieldwork was undertaken between 25th - 27th March 2009. The survey was carried out online. The figures have been weighted and are representative of all Scottish adults (aged 18+).

⁴ All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 1021 Scotland adults. Fieldwork was undertaken between 3rd to 8th March 2011. The survey was carried out online. The figures have been weighted and are representative of all Scotland adults (aged 18+).

⁵ Scottish Health Survey 2010, Scottish Government, Main Report, Chapter 4 - Smoking. Available from: www.scotland.gov.uk/Publications/2011/09/27084018/32 [Accessed 07.02.12]

⁶ Mons, U et al. Impact of national smoke-free legislation on home smoking bans: findings from the International Tobacco Control Policy Evaluation Project Europe Surveys. Tobacco Control doi:10.1136/tobaccocontrol-2011-05013.

<http://tobaccocontrol.bmj.com/content/early/2012/01/20/tobaccocontrol-2011-050131.short?rss=1> [Accessed 15.02.12]

⁷ King BA, et al. Secondhand smoke transfer in Multiunit Housing. *Nicotine & Tobacco Research*. 2010. 12(11): 1133-1141.

<http://ntr.oxfordjournals.org/content/early/2010/10/01/ntr.ntq162.abstract> [Accessed 08.02.12]

⁸ Kraev TA, Adamkiewicz G, et al. Indoor concentrations of nicotine in low-income, multi-unit housing: associations with smoking behaviours and housing characteristics. *Tobacco Control* 2009;18:438-44. <http://tobaccocontrol.bmj.com/content/18/6/438.full> [Accessed 08.02.12]

⁹ Wilson KM, Klein JD, et al. Tobacco-smoke exposure in children who live in multiunit housing. *Pediatrics* 2011;127:85-92. <http://pediatrics.aappublications.org/content/127/1/85>

¹⁰ Bearer CF. Environmental health hazards: How children are different from adults. *The Future of Children* [online] 5(2):11-26, 1995. Available from: www.princeton.edu/futureofchildren/publications/journals/article/index.xml?journalid=59&articleid=360 [accessed 06.02.12]

¹¹ Bohac DL, Hewett MJ, Hammond SK, Grimsrud DT. Secondhand smoke transfer and reductions by air sealing and ventilation in multiunit buildings: PFT and nicotine verification. *Indoor Air*, Volume 21, Issue 1, pages 36–44, February 2011. Full text available from: www.mncee.org/Innovation-Exchange/Reports-and-Technical-Documents/Secondhand-Smoke-Transfer-and-Reductions-by-Air-Se/ [Accessed 08.02.12]

¹² American Society of Heating, Refrigerating and Air-Conditioning Engineers Inc., Environmental tobacco smoke: Position document (October 2010) Available at: www.ashrae.org/home/search?k=environmental%20tobacco%20smoke [Accessed 04.02.12]

¹³ Repace Associates Inc, www.repace.com/ [Accessed 08.02.12]

¹⁴ International Agency for Research on Cancer, Monographs on the evaluation of carcinogenic risks to humans: tobacco smoke and involuntary smoking. Vol. 83. 2004, Lyon: IARC Press. Available: <http://monographs.iarc.fr/ENG/Monographs/vol83/index.php> [Accessed 02.02.12]

¹⁵ Report on Carcinogens, Tenth Edition; U.S. Department of Health and Human Services, Public Health Service, National Toxicology Program, December 2002. Available at: <http://ntp.niehs.nih.gov/ntp/roc/eleventh/profiles/s176toba.pdf> [Accessed 02.02.12]

¹⁶ International Agency for Research on Cancer, Monographs on the evaluation of carcinogenic risks to humans: tobacco smoke and involuntary smoking. Vol. 83. 2004, Lyon: IARC Press. Available: <http://monographs.iarc.fr/ENG/Monographs/vol83/index.php> [Accessed 02.02.12]

¹⁷ U.S. Department of Health and Human Services. The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006. www.surgeongeneral.gov/library/secondhandsmoke/ [Accessed 02.02.12]

¹⁸ International Agency for Research on Cancer, Monographs on the evaluation of carcinogenic risks to humans: tobacco smoke and involuntary smoking. Vol. 83. 2004, Lyon: IARC Press. Available: <http://monographs.iarc.fr/ENG/Monographs/vol83/index.php> [Accessed 02.02.12]

¹⁹ British Medical Association (2004). Smoking and reproductive life: the impact of smoking on sexual, reproductive and child health. BMA, London.

www.bma.org.uk/health_promotion_ethics/tobacco/smokingreproductivelife.jsp [Accessed 02.02.12]

²⁰ Ibid

²¹ Comhair SA et al. Detrimental Effects of Environmental Tobacco Smoke in Relation to Asthma Severity. *PLoS One*. 2011 May 4; 6(5):e18574. Epub 2011 May 4.

www.ncbi.nlm.nih.gov/pubmed/21572527 [Accessed 02.12.12]

²² Eisner MD, Iribarren C, Yelin EH, Sidney S, Katz PP, Sanchez G, Blanc PD.

The impact of SHS exposure on health status and exacerbations among patients with COPD. *International Journal of Chronic Obstructive Pulmonary Disease*. 2009;4:169-76.

www.ncbi.nlm.nih.gov/pubmed/19516915 [Accessed 02.02.12]

²³ Otsuka R., et al., Acute effects of passive smoking on the coronary circulation in healthy young adults. *Journal of American Medical Association*, 2001. 286: p. 436-41.

<http://jama.ama-assn.org/cgi/content/short/286/4/436> [Accessed 02.02.12]

²⁴ International Agency for Research on Cancer, Monographs on the evaluation of carcinogenic risks to humans: tobacco smoke and involuntary smoking. Vol. 83. 2004, Lyon: IARC Press. Available: <http://monographs.iarc.fr/ENG/Monographs/vol83/index.php> [Accessed 02.02.12]

²⁵ Otsuka, R, et al. Acute effects of passive smoking on the coronary circulation in healthy young adults, *Journal of the American Medical Association*, 286: 436-441, 2001. Available at:

www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11466122&dopt=Abstract [Accessed 02.02.12]

²⁶ Burghuber, O et al. Platelet sensitivity to prostacyclin in smokers and non-smokers, *Chest*, 90: 34-38, 1986. www.ncbi.nlm.nih.gov/pubmed/3522121 [Accessed 02.02.12]

²⁷ Community Fire Safety Study 2009 'Scotland Together', Scottish Government, http://www.lothian.fire-uk.org/IMAGES/Scotland_Together.pdf [Accessed 02.02.12]

²⁸ Smoking, Health and Social Care (Scotland) Act 2005 asp 13, Part 1, Section 4.

www.legislation.gov.uk/asp/2005/13/section/4 [Accessed 01.02.12]

²⁹ General Register Office for Scotland and National Records for Scotland. Estimates of Households and Dwellings in Scotland, 2010 – Table 3.

www.gro-scotland.gov.uk/files2/stats/household-estimates/he-10/households-dwellings-est-2010.pdf [Accessed 02.02.12]

³⁰ Ong MK et al . Estimates of Smoking-Related Property Costs in California Multiunit Housing. *American Journal of Public Health* August 18, 2011.

<http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2011.300170> [Accessed 15.02.12]

³¹ Environmental Protection Act 1990. Available at:

www.legislation.gov.uk/ukpga/1990/43/contents [Accessed 15.02.12]

³² Olfene, Amy K. Smoke-Free Policy Adoption in Connecticut Multi-Unit Housing Developments. *Smoke-free Housing New England*, November 2011.

www.matchcoalition.com/sites/default/files/CT_Healthy_Homes_Webinar.pdf [Accessed 15.02.12]



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