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**Second Hand Tobacco Smoke Exposure in
Residential Care Homes: Controlling the Risk**

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CONTENTS

1	Introduction	4
1.1	Definition	4
1.2	Key Challenges	4
1.3	Feasibility of Smoking Policies in Residential Homes	5
2	Possible Measures to Control Second Hand Smoke Exposure: Findings from Literature	6
2.1	Considerations.....	6
2.2	Possible Measures: Findings From Literature	6
3	Conclusions	9
4	Annexes.....	10
4.1	Annex 1: Regulations.....	10
4.2	Annex 2: Feasibility Studies	10
4.3	Annex 3: Other Similar Environments.....	12
5	Bibliography.....	14

1 INTRODUCTION

The Work Psychology section of the Health and Safety Laboratory (HSL) was asked by the Health and Safety Executive (HSE) to conduct a literature review to identify possible measures to control second hand smoking exposure in workplaces that are also homes (e.g. residential care homes). This work originated from the acknowledgement of increasing problems relating to clients/residents smoking in their ‘homes’ and a growing group of employees, such as care assistants, who argue that they should not be directed to work in an area with a high degree of smoke when there is increasing evidence that second hand smoking is harmful. The literature reviewed was in the form of academic journal articles, website information, magazine/newspaper articles and various documents from government/official organisations. This brief report summarises the information in the review, focusing on control measures for second hand smoke exposure.

1.1 DEFINITION

Breathing and inhaling other people’s smoke is called passive, involuntary, or second hand smoking. The non-smoker breathes ‘sidestream’ smoke from the burning tip of the cigarette and ‘mainstream’ smoke that has been inhaled and then exhaled by the smoker (ASH, 2004). Second hand smoking is an issue relevant to the workplace, as some employees are exposed to the smoke of fellow employees or that of customers or clients whether they want to be or not. There are certain regulations that are relevant to smoking in the workplace, cited in HSE’s guidance on second hand smoking (INDG63L, 2002). Such relevant regulations are described in Annex 1.

1.2 KEY CHALLENGES

There are many issues and conflicts surrounding smoking in residential care homes.

1. The care home is first and foremost a resident’s “home”. A smoking ban on long-term residents in workplaces such as care homes would be difficult to impose, as this would be a lifelong ban for most residents, unless they quit smoking or move elsewhere (Kochersberger and Clipp, 1996). Residents may feel that they should have the right to determine aspects of life considered important to them, such as the right to smoke in their home, particularly if they feel that smoking is one of the remaining pleasures and choices in life (Adler, Greeman, Rickers, and Kuskowski, 1997).
2. There is a conflict between the smoking of residents and the obligation or expectation that health care settings should encourage behaviours consistent with good health (Carosella, Ossip-Klein, Watt and Podgorski, 2002).
3. Facilities that permit smoking can face greater conflicts between residents and staff due to the need to assist and supervise residents’ smoking and concern over health risks of second hand smoking and fire (Adler et al, 1997).

4. How community nurses can negotiate second hand smoking when visiting patients in their own home was reported as being a particular challenge. It was recognised that any legislation that currently exists would not necessarily cover community nurses working in people's homes. It was argued that banning smoking was an infringement of the human rights of the patient and that it was important for patients to feel relaxed during treatment, which may occasionally require them to smoke. It may be difficult to enforce a smoking ban in the home during those times when visitors, such as nurses, may be present.
5. In addition to the health effects of smoking, ASH (2001) reported other costs associated with smoking. These included costs to employers in terms of sick pay and lost productivity among smokers and non-smokers. There may also be poor morale caused by friction between smokers and non-smokers. Benefits of smoking policies in the workplace, reported by ASH (2001) included reduced sickness absence, less risk of litigation from employees exposed to environmental tobacco smoke (ETS), reduced cleaning/redecorating, and reduced fire risk and insurance costs.

1.3 FEASIBILITY OF SMOKING POLICIES IN RESIDENTIAL HOMES

1.3.1 International Evidence

Other countries have introduced legislation to protect people, including workers, from environmental tobacco smoke, e.g. Australia, Canada, Hong Kong, Norway, with Eire following suit recently in 2004. However, while there are examples of countries that have passed laws to ensure all enclosed workplaces are smoke free, there are also cases where workplaces, such as care homes, are exempt from complete smoking bans (e.g. Eire and Australia). In Scotland, work is in hand to introduce legislation to ban smoking in all enclosed public places by Spring 2006, along the lines of the ban introduced in Eire in March 2004. Similar plans are also in train in Northern Ireland. England is currently consulting on legislation to make enclosed workplaces/public places smoke free. Every indication is that care homes are likely to be exempted from smoking legislation in England, Scotland and Wales.

1.3.2 Case Law

A case in the late 1990s considered the issues of reasonable practicability and whether a smoking policy can apply to residents of a nursing home (*Sylvia Sparrow – v – St Andrew's Homes Limited*, May 1998). The Judge finally held that the employers were not negligent; that a smoking policy could not reasonably apply to the residents and that the employer had taken reasonable steps to protect employees from the hazards of tobacco smoke. The details of this case can be found in Annex 2.

1.3.3 Feasibility Studies

Some research suggests smoking policies in homes can work and that they have no major long-term negative effect in terms of behavioural indicators of unrest or non-compliance with residents. The details of some such studies can be found in Annex 2.

2 POSSIBLE MEASURES TO CONTROL SECOND HAND SMOKE EXPOSURE: FINDINGS FROM LITERATURE

The majority of literature reviewed by HSL cited similar general measures that employers could adopt for protecting employee health and welfare to those recommended by HSE in their leaflet “Passive Smoking at Work” (INDG63) and their booklet “Health and Safety in Care Homes (HSG220). These are:

- Completely banning smoking at work.
- Banning smoking (e.g. in common rooms) and allowing smoking in designated rooms.
- Having separate smoking and non-smoking work areas (with signage).
- Providing adequate ventilation to improve air quality (regular monitoring of such ventilation systems would also be needed).

2.1 CONSIDERATIONS

ASH (2001) discussed a number of issues that require consideration when developing a workplace smoking policy. Some of these may apply to workplaces where people also live. For example:

1. Does a smoking policy apply to residents as well as employees? It is important to ensure that any policy is clearly defined and it discusses who is included in the policy and what it means for different people (e.g. staff, visitors and residents).
2. Some clients such as those with mental health problems may have other priorities than stopping smoking.
3. A complete indoor smoking ban creates issues with outdoor weather conditions and outdoor smoking may not be an option for more immobile residents who cannot get outside easily.
4. Having smoking rooms is only possible if the building allows for it and there is proper insulation and ventilation.
5. Ventilation must be effective at improving air quality or removing tobacco smoke to safe levels and is often not recommended as the only measure.
6. Offering help for smokers, such as advice leaflets, nicotine replacement therapy (NRT), cessation programmes and support should be included and may be possible, but these measures must be suitable for residents and are most effective if the individuals are interested and want to quit smoking.
7. HSEs leaflet (INDG63) states that a smoking policy should give priority to the needs of non-smokers. This is confirmed by ASH (1999), who reported that, where there is conflict, the right of non-smokers to have clean air should prevail over the rights of smokers, and Seymour (2001) who stated that ‘freedom of choice’ to smoke should not be used as an argument for unrestricted smoking.

2.2 POSSIBLE MEASURES: FINDINGS FROM LITERATURE

Whilst there is not a definitive list of measures known specifically to effectively control second hand smoke exposure in workplaces that are also homes, there is a range of **suggestions** that may help control second hand smoke in these environments, depending on the circumstances. These are summarised below. However, it is important to note

that these are only suggestions and as such have not been formally evaluated or well documented as effective interventions.

2.2.1 Environmental Measures

- Provide a smoking room that is glassed in and near the nursing station, allowing supervision of residents whilst they smoke without non-smoking staff having to be exposed to ETS for extended periods of time.
- Provide smoking areas that are environmentally separate from care, treatment or service areas. A smoke-free room, in both care homes and private homes, where treatment could take place could be set aside.
- Create specific smoking floors in care homes, or smoking houses in sheltered accommodation communities, where individuals wishing to smoke are grouped. However, it is recognised that this may not be feasible in some care homes due to space being at a premium.
- Provide designated smoking areas outdoors that are physically accessible, protected from the elements and located at a reasonable distance.

2.2.2 Equipment Measures

- Protection masks/respirators may be useful, but to be effective at removing tobacco smoke particulate and gases cost and communication difficulties are very likely. Therefore, they may not be feasible for employees working with care home residents.
- Use smoke detectors to monitor unauthorised smoking and to minimise fire risk.

2.2.3 Work Practices Measures

- Limit employees' exposure to ETS by monitoring and restricting the amount of time they spend in smoking areas (e.g. only for short periods).
- A policy could be negotiated whereby staff could ask for a smoke free environment. Clients would be asked not to smoke in the presence of the employee or, if possible, for a certain amount of time before the employee entered. This would apply to both care homes and private homes.
- At the start of any 'care in the community' process, any provisions for a smoke free environment during care should be negotiated as part of the care plan from the outset.
- When booking visits to clients' homes in advance, try to determine if anyone smokes at the premises. This helps to increase nurse and client awareness of the environment that the nurse will be working in. Frequent personal contacts and discussions with clients/residents may also raise awareness of the smoking policy in general.
- In a private home, if a request for a smoke free environment is refused, the client could be asked to attend a local health centre, where practicable and if appropriate to the client.
- Ask that only employees who smoke work with clients who smoke or in areas where clients smoke.

- Set up non-smoking areas that vary according to the time of day or establishes specific times when smoking may occur in the designated smoking area and when supervision is available.
- Implement “grandfathering” of existing residents if a new smoking ban has been implemented. This involves the provision of indoor designated smoking areas for current smoking residents while new residents have to comply with new smoking bans/policies. However, if space is at a premium this may not be feasible in some care homes.
- Where practicable, employees are given the choice as to whether they wish to supervise a resident who smokes or not and given the right to refuse to accompany the resident to and in the smoking area.
- Individual risk assessments and health assessments should be offered to staff exposed to passive smoke or worried about their levels of exposure.
- The practice of using tobacco as a reward or incentive for long-stay or mental health clients should not be tolerated and other incentives/rewards should be identified.
- Continued smoking in a long-term residence may indicate a scarcity of alternative pleasurable activities and the availability of a variety of enjoyable activities may assist in the creation of an environment conducive to the promotion of smoking cessation.

2.2.4 Education/Training Measures

- Discourage residents who smoke from doing so and provide them with educational materials about the benefits of quitting and smoking cessation strategies such as group sessions, individual counselling, NRT gum/patches, and formal and self-help treatment opportunities. Some smokers will not be ready to give up or may find it harder when they work/live with clients with high smoking rates so these people should also be offered time and support to adapt to smoking restrictions and complete smoking cessation programmes.
- High profile events, such as a “No Smoking Day” may provide a catalyst for quitting.
- Increase training and support offered to healthcare staff so that they are better able to implement the policy, particularly in difficult situations, and are able to give cessation advice.
- Simple leaflets explaining the smoking policy rules should be provided to both staff and residents as well as included in all new employee recruitment and new resident admission information.
- Smoking staff should have a responsibility to comply with any policy in order to lead by example and be a positive role model of appropriate behaviour to residents.

3 CONCLUSIONS

It is difficult to see how workplaces in which people are resident for extended periods of time can be made into a completely smoke free work environment whilst some residents continue to smoke. Nevertheless, the literature reviewed suggests that significant improvements in the work environment can be achieved, and acceptable effective policies can be developed, especially if there is consultation and co-operation between the various parties involved. However, despite some evaluation of effectiveness, evaluation is limited so exactly how successful or effective different measures are is uncertain.

The literature suggests many measures for controlling ETS exposure in 'general' workplaces. However, there did not seem to be a definitive list of measures that are known to effectively control second hand smoke exposure specifically in workplaces that are also homes. Nevertheless, the suggested measures outlined in this review expand on the general measures described in leaflets such as INDG63 (Passive Smoking at Work) and applies them to the care home context. However, measures may need to be further adapted for community settings.

The policy principles and measures that have been discussed in this review are realistic in acknowledging that changes to policy and practice need patience and persistence. A strong management lead must address the complex issues in order to protect staff health and well being from extended exposure to passive smoke, while at the same time balancing the rights of individuals to smoke in their home.

4 ANNEXES

4.1 ANNEX 1: REGULATIONS

Under section 2 of the Health and Safety at Work etc Act 1974, employers have to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all their employees. This means that if a risk to health can be demonstrated, for example if a worker with a respiratory condition is forced to work in a very smoky atmosphere which may make that condition worse, the employer must take action to deal with the risk.

Employers also have a common law responsibility to provide a safe place and system of work. They should act to resolve complaints from employees that their health may be at risk from a smoky environment.

Finally, under the Workplace (Health, Safety and Welfare) Regulations 1992, employers have to ensure that there are arrangements to protect non-smokers from discomfort caused by tobacco smoke in rest rooms or rest areas.

4.2 ANNEX 2: FEASIBILITY STUDIES

Patten, Martin, and Owen (1996) conducted a literature review of 21 studies to investigate the feasibility of establishing smoke-free psychiatric and chemical dependency units. Results showed that staff in both psychiatric and chemical dependency units anticipated more smoking related problems following a smoke-free policy than actually occurred, and this was attributed to client acceptance of the policy. However, some results suggested more negative attitudes of smoking clients or difficulty adjusting to a smoking ban, as well as few changes in actual smoking behaviour. There were also some reports of surreptitious smoking and non-participation in smoking cessation interventions. Nevertheless, the researchers concluded that a smoke-free environment (i.e. complete indoor ban) was a reasonable and achievable goal in these settings, without any major behavioural consequences (e.g. attention seeking, surreptitious smoking and disruptive behaviour needing seclusion or restraint). This conclusion is supported by a telephone survey of state psychiatric long-term care facilities which revealed that smoking bans did not lead to increases in “behavioural problems” and did lead to an improvement in the environment with cleaner and better smelling air and fewer cigarette burns (Parks and Devine, 1993, cited in Kochersberger and Clipp, 1996). In addition, some studies found abstinence from smoking (28% of clients) or reduction in cigarette consumption (37% of clients) following a smoke-free policy, which all suggests a positive outcome of prohibiting smoking in homes. However, it was acknowledged that the implementation of a smoke-free policy in chemical dependency units met with more problems than in psychiatric settings (difficulty adjusting and surreptitious smoking were consistently reported).

In a more recent study, Guebaly, Cathcart, Currie, Brown and Gloster (2002) also conducted a critical literature review of empirical studies to investigate the impact of total or partial smoking bans on smokers who are in long-term mental health and

addiction settings. Similar to the above research, evidence from the reviewed literature suggested that policies that ban smoking have no major long-term negative effect in terms of behavioural indicators of unrest or non-compliance. However, the policies appear to have had little or no effect on smoking cessation, as the results of three studies they reviewed showed that smoking resumed immediately after discharge or that motivation to quit was lower among clients whose smoking was restricted. However, another study found an increase in the proportion of smokers who were interested in quitting (24% before ban; 61% after ban) and the proportion of smokers who abstained from smoking (9% before ban; 41% after ban). This suggests that smoking cessation strategies should be an inherent component of smoking ban policies.

4.2.1 Case Law

A case in the late 1990s considered the issues of reasonable practicability and whether a smoking policy can apply to residents of a nursing home (*Sylvia Sparrow – v – St Andrew’s Homes Limited*, May 1998). Sylvia Sparrow, backed by the Royal College of Nursing, alleged that the company failed to provide a safe work environment. She began part time employment in 1986 in a home where residents and staff smoked. A room was provided for staff who smoked and for the residents, three rooms were used depending on the residents severity of dependency: the green room had a lot of heavy smokers smoking all day, the blue and pink rooms less so. Mrs Sparrow suffered adverse reactions to the tobacco smoke and attempts were made to move her around the workplace to work in different rooms, lessening her exposure to smoke. However, due to staffing difficulties they could not avoid putting her to work with residents in the ‘smokers corner’ in the green room. In 1990, Mrs Sparrow gave the employers a medical note stating that she should work in a smoke free environment, as she had been diagnosed as suffering from asthma. The employer took steps to avoid smoke exposure, but it was always subject to staffing and residents’ requirements, and she still had to go in the green room and was still exposed to tobacco smoke. An article on the BBC News website (May 1998) reported that the home’s former matron told the hearing that there was nothing they could have reasonably done to stop elderly residents smoking in their lounge. The Judge acknowledged that the home’s duty of care embraced the residents as well as staff, which may have necessitated staff entering the smokers’ area in the interests of the residents. The Judge finally held that the employers were not negligent, that a smoking policy could not reasonably apply to the residents and that the employer had taken reasonable steps to protect employees from the hazards of tobacco smoke. Also, it was held that evidence to prove a link between second hand smoking and asthma was tenuous, and that it was not reasonably practicable to maintain a safe system of work that served to remove exposure to smoke in the green room. Indeed, Sylvia Sparrow said herself that the residents were her responsibility and she would not leave them. The employers could not ban the residents from smoking due to the nature of their dependency and addiction to tobacco. However, it must be recognised that once a non-smoking employee complains about the effects of tobacco smoke on him/her, the employer must take appropriate remedial action. (Health Education Authority, 1999; BBC News Website, 1998; *The Daily Telegraph*, *The Guardian*, *The Independent* and *The Times*, 1998).

4.3 ANNEX 3: OTHER SIMILAR ENVIRONMENTS

4.3.1 Hospitals

In a slightly different environment, Strobl and Latter (1998) explored the effects of a complete smoking ban in a hospital. They found that support for the policy was very limited and compliance was poor among patients as well as staff. Also, it failed to significantly reduce nurses' cigarette consumption. Such results indicate that smoking policies may have limited impact on smoking behaviour. Nevertheless, the policy was influential in a small number of smokers' decisions to stop. However, hospital stays are more short-term, and there may be more effect in longer stay residences. Also, it must be remembered that many studies looking at smoking policies in the hospital environment focused more on employee smoking behaviour, and the effect on patient smoking in a nursing home may be different.

Most of the possible measures that may be used in the hospital environment are similar to the general measures and the specific measures for care homes that are discussed in the main report. However, some further measures that may be more specific to hospitals may include: not selling cigarettes in the hospital/eliminating cigarette vending machines, ensuring that smoking areas are in a less populated area of the hospital where there is less pedestrian traffic, or providing incentives such as monetary rewards or entering a prize draw for quitting. In addition, it may be useful to have gradual introduction of restrictions, starting with places supported by all groups (never, former and current smokers) and accompanied by education about health effects. Pederson et al (1987) suggested that this strategy might reduce the potential for conflict between smokers and non-smokers, while providing a basis for acceptance of greater restriction.

4.3.2 Prisons

Prisons are another situation where the workplace of some people is the living space of others. Furthermore, prisoners 'live' there not of their own choosing. There could be information regarding smoking prevalence and smoking policies in prisons that could add to the debate on second hand smoking in workplaces that are also homes

Hammond and Emmons (2004) showed the need for tobacco control strategies when they concluded that second hand smoke concentrations in correctional facilities could be quite high. They measured the second hand smoking exposure at three correctional facilities in the US. In the prisons, the average concentrations of nicotine were high when smoking was allowed, with most living and sleeping areas averaging 3-11 $\mu\text{g}/\text{m}^3$ and the gym that was used as a bunkroom averaging 25 $\mu\text{g}/\text{m}^3$. These values compare to an average of 2 $\mu\text{g}/\text{m}^3$ in the homes of smokers. Hammond and Emmons (2004) also evaluated the effectiveness of a ban on smoking in reducing second hand smoking exposure of prisoners in two US prisons. Although not explicitly clear in the research, it appeared that the prisons that were evaluated implemented a total ban indoors, while allowing smoking outdoors. The researchers found that the smoking ban significantly reduced nicotine concentrations in the living areas to averages of 1.5 – 2.2 $\mu\text{g}/\text{m}^3$ (from averages of 3 – 11 $\mu\text{g}/\text{m}^3$) and all post-ban samples were less than 5 $\mu\text{g}/\text{m}^3$. This suggests that some nicotine concentrations remained even after the introduction of the

smoking ban, although it is not clear whether this is because some people continued to smoke indoors. However, the researchers reported that the residual nicotine concentrations might reflect the ineffectiveness of the modified smoking restrictions, (e.g. minimal consequences for its violation and allowing smoking outdoors), which may suggest that some people continued to smoke. Nevertheless, these researchers concluded that while second hand smoke concentrations in correctional facilities can be quite high, policies banning smoking in the prison setting are effective in reducing, but not eliminating, exposure to passive smoke.

Most of the possible measures that may be used in the prison environment are similar to the general measures and the specific measures for care homes that are discussed in the main report. However, some further measures that may be more specific to prisons may include: smoking permitted in external recreation areas, established mechanisms for the resolution of disputes concerning the policy, stopping the practice of free tobacco, frequent personal contact or explanatory material in staff newsletters and discussions with prisoners to raise awareness of the policy (e.g. following this awareness raising a prisoner asked for a no-smoking cell, so information and consultation could be important to policy implementation and acceptance). Restrictions on smoking to designated times and places are important in facilitating smoking reduction and may be successful but in prison settings (and maybe other institutionalised settings) they are not always effectively enforced in that smoking employees may be less supportive of restrictions, which does not facilitate inmates compliance, inmates may contravene policies as a way of '*stabbing institutional surveillance in the back*', and non-smoking employees may ignore violations to '*keep the peace*'.

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