Reducing the risks of environmental tobacco smoke for
looked after children and their carers

Introduction
Smoking continues to be the greatest single cause of avoidable mortality in the UK. The health risks of environmental tobacco smoke (second-hand smoke – SHS) have been clearly identified. In 2007, the World Health Organisation (WHO) published policy recommendations on protection from exposure to second-hand smoke, and stated: ‘There is indisputable evidence that implementing 100 per cent smoke-free environments is the only effective way to protect the population from the harmful effects of exposure to SHS’ (WHO, 2007). Protecting the public from the dangers of second-hand smoke is a key part of the UK public health agenda, which was strengthened by the introduction of protective legislation from 2007 (banning of smoking in workplaces and enclosed public places). Some of this legislation is specifically in place to protect children, e.g. the banning of smoking in cars. Public Health England has set a target of a smoke-free generation by 2025 (Public Health England, 2015).

Smoking rates are declining, but over 15 per cent of adults still smoke (Office of National Statistics, 2016). In England, five per cent of boys and six per cent of girls; in Wales seven per cent of boys and nine per cent of girls; and in Scotland eight per cent of boys and nine per cent of girls, smoke regularly (Royal College of Paediatrics and Child Health, 2017).

Given the worldwide shift in attitudes to smoking and the growing scientific evidence, it will become increasingly difficult for local authorities to justify placing children in environments where they are exposed to the impact of passive smoking. In an ideal world, no child for whom “being healthy” was given priority would ever be placed in a smoking household. Social care professionals who make placement decisions on behalf of vulnerable children must give a high priority to the present and future health of these children. This is especially true for looked after children, who frequently come into the care system with neglected or impaired health. This Practice Note clarifies, both for agencies and prospective carers, the very significant potential harm to a child who lives in an environment where there is daily exposure to tobacco smoke. The National Minimum Fostering Standards state that: ‘Children should live in a healthy environment where their physical, emotional and psychological health is promoted’ (Department for Education, 2011).

We recognise that the risk of placing a child in a smoking household is only one factor in the process of the holistic assessment of a child’s needs. However, the scientific evidence supporting the recommendations, which is set out later in this Practice Note, is very strong and must be given sufficient weight in any matching process. Stopping smoking is the single most important thing that any adult can do to protect their health and increase life expectancy. We would strongly recommend that all substitute carers should be proactively encouraged to stop smoking.

Adoption agencies are required to take into account the Government view that there should be no “blanket” bans when considering applications from prospective adopters. The issue is therefore not one of banning prospective adopters and new carers, but of engaging with them, providing information and advice, and facilitating access to smoking cessation programmes.

What is in second-hand smoke and how are children exposed?
Breathing other people’s smoke is called passive, involuntary or second-hand smoking. Tobacco smoke in the home, in public spaces and restaurants is an important source of exposure to a large number of
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Unlike adults, who can choose whether or not to be in a smoky environment, children have little choice. Outside school, children spend most of their time at home, indoors with their parents or carers. The younger the child, the more likely it is that the child will spend most of the day physically in the same room as his or her smoking parent(s). Separating smokers from non-smokers, opening windows, or using air filters does not prevent children from breathing second-hand smoke.

A child breathes both the “sidestream” smoke from the burning tip of the cigarette and also the “mainstream” smoke that has been inhaled and then exhaled by the smoker. Fielding and Phenow (1988) estimated that nearly 85 per cent of the smoke in a room results from sidestream smoke. Many potentially toxic gases are present in higher concentrations in sidestream smoke than in mainstream smoke.

The particles in tobacco smoke include tar, nicotine, benzene and benzopyrene. The gases include carbon monoxide, ammonia, dimethyl nitrosamine, formaldehyde and hydrogen cyanide. Some of these have marked irritant properties, and 60 are known or suspected carcinogens (substances that cause cancer). The US Environmental Protection Agency has classified environmental tobacco smoke as a Class A human carcinogen.

Cotinine is a metabolite or breakdown product of nicotine as it is “processed” by the human body. It is produced only by nicotine and is therefore a good indicator that nicotine has been inhaled or otherwise introduced into the body. People who do not smoke and who are not exposed to other people’s smoke should not have measurable cotinine in their blood, urine or saliva.

Spencer et al (2005) studied the cotinine levels in toddlers aged 18–30 months living in 309 smoking households in the Midlands to see if the amount of cotinine in the children’s urine was influenced by their parents’ reported smoking patterns. Most of the parents in this study (88 per cent) reported that they were taking some measures to protect their children from their cigarette smoke. These measures included: smoking fewer cigarettes; not smoking in the same room as the child; not smoking in the child’s bedroom; not smoking in the living room; airing rooms after smoking; and, finally, banning smoking completely in the house. The last option was also the least popular measure with only 14 per cent of households reporting a complete household ban. However, only a total household ban on cigarette smoking was associated with significant reductions in cotinine levels. The other less strict measures adopted by parents appeared to have little impact on the children’s exposure to cigarette smoke in this age group. Even the children from the households where smoking was completely banned indoors still had measurable cotinine in their urine. Their bodies were still metabolising nicotine despite the efforts of their carers to protect them.

The researchers concluded that even this measure was unlikely to fully protect children from the adverse effects of tobacco smoking. The effects of passive smoking are cumulative over time and low levels of exposure might still be harmful. Whilst it might reassure professionals that some anti-smoking measures are in place, smoking outside is unlikely to be sustainable for 52 weeks of the year. In addition, many children in the care system have unpredictable behaviour and leaving a child unsupervised whilst a carer smokes outside may not be an acceptable solution for most young children.

The immediate effects of second-hand tobacco smoke in children

Exposure to second-hand smoke in the home is a major hazard to the health of the many children in the UK who live with smokers. Although legislation has now prohibited smoking in enclosed public spaces, the workplace and in cars with children, the vast majority of deaths and illnesses are caused by passive smoking in the home, to which legislation does not extend. More than 80 per cent of second-hand smoke is invisible and odourless. The only way to completely protect children from the health risks of passive smoking is by making homes entirely smoke free.

Young children are particularly susceptible to the effects of second-hand smoke because their lungs and airways are small and their immune systems are immature. Consequently, when exposed to environmental tobacco smoke they are more likely than adults to develop adverse health effects. Children also have higher respiratory rates than adults and therefore breathe in more harmful chemicals than an adult would in the same time period.

There is consistent scientific evidence to support the association of an increased risk of adverse health effects in children brought up in smoking households. The report from the Tobacco Advisory Group of the Royal College of Physicians, Passive Smoking and Children (2010), found that passive smoking:

- increases the risk of lower respiratory tract infections (pneumonia and bronchiolitis) in children. The risk is increased by over 50 per cent.
- increases the risk of wheezing and asthma at all ages. There are at least 22,000 new cases of wheeze and asthma per year as a consequence of exposure to second-hand smoke.
● more than doubles the risk of sudden infant death syndrome (cot death). Cot death is the most common cause of death in children aged 1–12 months.
● increases the risk of middle ear disease in children by over 35 per cent. This is associated with hearing loss, need for surgery, secondary speech delay, difficulties in school and social isolation.
● more than doubles the risk of bacterial meningitis.

Each year, these cases generate over 300,000 UK GP consultations and about 9,500 hospital admissions that are entirely avoidable. The evidence for some of the conditions is dose related – the greater the number of cigarettes smoked in the home, the greater risk to children. The risks to children will also be increased by the frequency of visits of smoking relatives and family friends. Reducing smoking in the household would result in significant reductions in respiratory morbidity and mortality in infants and children.

Many children in care have been exposed to antenatal cigarette smoke and therefore are already at an increased risk of sudden infant death syndrome and respiratory disease.

The health effects of second-hand tobacco smoke on adults

The Department of Health’s Scientific Committee on Tobacco and Health (2004) issued a report that concluded that exposure to second-hand tobacco smoke can cause both lung cancer and heart disease in adult non-smokers. This report estimated that non-smokers exposed to second-hand smoke increased their risk of developing lung cancer by about 24 per cent. The best estimate for the increased relative risk of heart disease was about 25 per cent. Breast cancer risk in women has also been shown to be increased through exposure to second-hand smoke, with a 65 per cent increase in premenopausal breast cancer risk among “never smokers” exposed to second-hand smoke (Johnson et al, 2011). Ultimately, such exposure increases the risk of death, with Jamrozik (2005) estimating that each year passive smoking at home might account for 2,700 deaths in people aged 20–64 in the UK, and 8,000 deaths among people aged 65 or above (in addition to those dying through workplace exposure).

Other effects of second-hand tobacco smoke on children and young people

Charlton and Blair (1989) looked at absenteeism amongst 2,800 young people aged 12 and 13 in the North of England and showed maternal smoking was associated with an increased rate of absence from school. This issue is particularly important for looked after children, who frequently come into the care system with neglected education, are more likely to be excluded from school for other reasons and whose educational achievements in care are poor (Department of Health, 2015). More recent papers also note an increase in aggressive and antisocial behaviour associated with exposure to household smoke, even when controlled for other factors such as gestational smoke exposure, parental history of conduct disorder and family adversity variables, and even when the exposure is transient (Pagani and Fitzpatrick, 2013). This is particularly relevant in relation to foster carers and other alternative carers.

The implications of becoming a smoker during childhood

Many young people come into the care system as smokers. Others only become smokers whilst being looked after. The health implications for these young smokers are serious and those responsible for their welfare should do everything that they can to help them quit the habit. It is well recognised that the risk and severity of many diseases caused by smoking is directly related more to duration of smoking rather than the number of cigarettes smoked per day.

The Royal College of Physicians (1992) reported on the significant ill effects of taking up smoking in adolescence. The earlier in life that children start smoking, the greater the risk of developing one of the many diseases associated with smoking, such as heart disease and cancer. Smoking causes four out of five cases of lung cancer and is the largest single preventable cause of cancer each year in the UK (implicated in one out of four cancer deaths and in one out of five cancer cases). It is implicated in more than 14 types of cancer, including mouth, pharynx, nose and sinuses, larynx, oesophagus, liver, pancreas, stomach, kidney, bowel, ovary, bladder, cervix, and some types of leukaemia. Children who smoke are between two and six times more susceptible to coughs, wheeziness and shortness of breath than those who do not smoke. Smoking is known to be a cardiac stimulant, which magnifies the effect of stress on the heart. It also increases blood coagulability and adversely affects blood lipids. Sub-arachnoid brain haemorrhage is six times more common in young smokers than in non-smokers.

Young smokers take more time off school than non-smokers. They are physically less fit than other children and are slower at both sprints and endurance running. Smoking increases skin ageing and skin wrinkling. Female smokers are two to three times more likely to be infertile, have a miscarriage or ectopic pregnancy than non-smokers, and fertility can also be affected by second-hand smoke.
Reducing the risk of children becoming smokers

A longitudinal multigenerational study looking at parent and child cigarette use (Vuolo and Staff, 2013) confirmed earlier reports, such as that from the World Health Organisation (1999), that reported that children living with adults who smoke are at least three times more likely to be smokers than those whose parents do not smoke. Adolescent children from families where parents/older siblings smoke are more likely to take up the habit, partly because of modelling and reinforcement of behaviour and partly from the reported relatively strong genetic influences. Growing up in a household where adults/siblings smoke often means that children perceive smoking as the “norm”. Their parents’ approval or disapproval of the habit is a significant factor in determining whether a child will eventually become a smoker.

Twelve-year-olds whose parents smoked were twice as likely to begin smoking cigarettes on a daily basis between the ages of 13 and 21 than were children whose parents didn’t use tobacco, according to a study that looked at family influences on smoking habits (Schwarz, 2005). The research indicated that parental behaviour regarding smoking, not attitudes, is the key factor in delaying the onset of daily smoking, according to Karl Hill, director of the University of Washington’s Seattle Social Development Project (Schwartz, 2005). Hill stated:

Keeping children from smoking starts with parents and their behaviour. Some parents say they disapprove of teenage smoking, but continue to smoke themselves. The evidence is clear from this study that if parents don’t want their children to start smoking, it is important for them to stop or reduce their own smoking.

Young people whose parents have ever smoked are more likely to become smokers, even if their parents quit before they were born, according to a new study. Young people with an older sibling who smokes are also more likely to start using cigarettes.

Electronic cigarettes

Electronic cigarettes, also known as vaporisers, are not tobacco cigarettes. They are nicotine delivery systems that do not contain tobacco. The nicotine is delivered orally to users in the form of vapour, rather than in the form of smoke. They are recently developed products, and due to this the evidence about their use in terms of effects on health is evolving and can only be based on the length of time that they have been in existence (see ASH, 2016 for details of the different devices).

The use of e-cigarettes, offering a tobacco-free form of nicotine consumption and behavioural substitution, has been promoted as a tool to reduce health risk, assisting those who wish to stop smoking tobacco. Public Health England reports published in 2015 and updated in 2018 (McNeill et al, 2015, 2018) concluded that e-cigarettes are significantly less harmful than tobacco, whilst acknowledging that they are not completely risk-free products. However, the exact level of harm reduction reported has been questioned (Lancet, 2015). There have been concerns around the lack of evidence regarding the longer term health effects of e-cigarettes, given not only their nicotine content but also other agents such as solvents and metal residues that may pose risk to health. To date, the levels of metals identified in e-cigarette aerosol do not give rise to any significant safety concerns, but metal emissions, however small, are unnecessary (McNeill et al, 2018). In the UK, e-cigarettes and e-liquids are regulated by the EU Tobacco Products Directive (TPD) 2016. This regulatory model means that if ingredients are identified that are a cause of concern for health, they can be prohibited. There is no current evidence showing that e-cigarette emissions (second-hand aerosol) pose specific long-term health risks (McNeill et al, 2018).

NICE (National Institute for Health and Care Excellence) guidelines (2018) state that:

The evidence suggests that e-cigarettes are substantially less harmful to health than smoking but are not risk free. The evidence in this area is still developing including evidence on the long term health impact.

Concerns have been raised about the health impact of nicotine (World Health Organisation, 2014). The questions raised relate to whether nicotine could have adverse effects in pregnancy, whether there is a contribution to cardiovascular disease, and also whether there are potential adverse effects on brain development in children and adolescents.

However, other studies looking at the impact of nicotine when delivered via nicotine replacement therapy (NRT) (e.g. nicotine patches) have not found significant negative effects. In a study about cardiovascular health, the use of NRT was not associated with any increase in the risk of heart attack, stroke or death (British Medical Association, 2018). NRT is prescribed to women during pregnancy for a short period if other smoking cessation methods fail (NICE), and NRT use was not found to increase risk of harm to the foetus (McNeill et al, 2018).

Cases of poisoning in young children associated with e-cigarettes (ingesting liquid) have increased, according to a recent US study; this is a concern given the potential toxicity of nicotine, with a death reported in association with a nicotine liquid exposure (Kamboi et al, 2016). The EU Tobacco Products Directive 2016 places...
manufacturing requirements on products, including making them child- and tamper-proof with the aim of preventing accidents.

Concerns have been raised that the availability of e-cigarettes, which are marketed in various flavours that could be attractive to children and young people, might increase the use of these products by these groups, potentially resulting in adverse consequences for health and encouraging nicotine dependency. A report by the Centers for Disease Control and Prevention in the US (2015) indicated a threefold increase in e-cigarette use amongst US high school students between 2013 and 2014. The British Medical Association noted that although the use of e-cigarettes has not been rising significantly amongst UK teenagers, this should continue to be monitored (2018). E-cigarettes cannot legally be sold to under-18s in the UK.

There is concern that children and young people might be influenced by a role modelling effect should their carers be seen using e-cigarettes, and that the use of these products might normalise “smoking” behaviour. However, a recent report by Public Health England (McNeill et al, 2018) advises that there is currently no evidence in England of a gateway effect of young people starting to use e-cigarettes and then becoming smokers. Although there is agreement internationally that e-cigarettes are significantly less harmful than smoking tobacco, at the moment there is no international consensus on the risks/benefits of e-cigarettes.

The leading public health bodies in England, Wales, Scotland and Northern Ireland have all published Position Statements on e-cigarettes. Weblink addresses for these statements are included in the Bibliography. Extracts from the statements are given below.


Vaping poses only a small fraction of the risks of smoking and switching completely from smoking to vaping conveys substantial health benefits

Public Health Wales (2017):

We recognise that there are a lot of confusing and contradictory messages around e-cigarettes. This is because there isn’t one simple answer – it is different for different groups of the population… In simple terms, if you don’t smoke, don’t vape. But if you are a committed smoker who is unwilling or unable to quit, switching completely to e-cigarettes will be beneficial to your health.

NHS Scotland (2017):

To be absolutely clear, e-cigarettes are useful for public health and health service purposes only as a potential route towards stopping smoking. Access to e-cigarettes needs to be controlled carefully; they are not products for children or non-smokers. There is still a lot we do not know about e-cigarettes. They are not risk free, but based on current evidence, they have a much lower risk than tobacco. We need to carry out research to understand these risks but in the meantime we need to make the best use of the situation to reduce tobacco smoking further.

Public Health Agency Northern Ireland 2015:

E-cigarettes are a type of nicotine replacement product. The latest report from Public Health England suggests they are less harmful to health than smoking, but the short and long-term effects of using e-cigarettes – “vaping” – are not yet known.

Many of the children and young people who require substitute care face disadvantage in areas of their life, including health. The welfare of this vulnerable group is the primary concern of the professionals and agencies charged with their care.

Whilst e-cigarette use as a substitute for tobacco smoking is likely to pose a much lower level of risk to the health of the individual who switches, the evidence that is currently available does not confirm that they are completely safe. It is important to continue to monitor the impact of e-cigarettes on health and any potential risks to children and young people living with those who use them.

**Discussing smoking patterns/behaviours with carers**

Social workers involved with the recruitment and assessment of prospective carers will need to explain any agency policies regarding smoking and caring for children, and discuss associated health risks. This should also involve discussion about attitudes around protecting children from exposure to environmental tobacco smoke. The prospective carer’s health assessment should include a description of their smoking status and patterns.

**Recommendations to protect children from second-hand tobacco smoke**

We fully acknowledge that many excellent substitute carers smoke. There is also a national shortage of both foster carers and adopters. Despite this, all those who recruit foster carers or adoptive parents need to give the protection of the health of children in their care a high priority and will have to balance the positive elements of any placement against the negative impact of smoke exposure. This means that, wherever practicable, all placement teams should try to protect children from
exposure to second-hand smoke at home. Placing authorities also need to be aware of potential future legal action if a child develops a smoking-related disorder after being placed in a foster or adoptive home in which family members smoke.

**Recommendations**

1. All carers should be encouraged to implement a smoke-free home and car.
   - Homes should be smoke-free.
   - If carers or visitors do smoke, they should smoke right away from the house.
   - Carers should not smoke in the presence of children or allow others to do so.
   - Social workers should request that birth family members do not smoke at or immediately prior to contact visits.

2. Children under five years old should not be placed with carers who smoke because of the potential risk to health. This is because of the particularly high health risks for very young children and toddlers who spend most of their day physically close to their carers.

3. All children with a disability, which means they are often dependent on and in close proximity to their carer, and all children with respiratory problems such as asthma, and all those with heart disease or glue ear should not be placed with smoking families.

4. In all long-term fostering, kinship and adoptive placements, the additional health risks to the child of being placed in a smoking household need to be carefully balanced against the available benefits of the placement for the child. This is because the significant risks of exposure to passive smoking increase with time.

5. Carers who have successfully given up smoking should not be allowed to adopt or foster those children identified in recommendations 2 and 3 till they have given up smoking for a minimum period of 12 months. This is because relapse rates in the first three to six months are high; after six months the risk of relapse is less; and after 12 months most people will be permanent non-smokers.

   However, this approach may not be appropriate for kinship carers. While prospective foster carers and adopters have a period of time during recruitment and preparation for their caring roles where they have the opportunity to evaluate and change smoking choices, kinship carers often take up the role within a much shorter time frame. For this reason, we recommend that kinship carers are:
   - advised about the health risks of smoking and second-hand smoking;
   - encouraged to implement a smoke-free home and car;
   - encouraged to give up smoking;
   - signposted to local smoking cessation services and encouraged to use nicotine replacement products.

6. Children from non-smoking birth families should not be placed with substitute carers who smoke.

7. All older children, who are able to express a view, must be given a choice to be placed with a non-smoking family.

8. All children and young people who smoke should be provided with support to give up smoking.

   All carers should be advised about the risks of buying cigarettes/e-cigarettes for young people. (It is illegal to purchase cigarettes or e-cigarettes for under-18-year-olds.) They should never be used as a reward for good behaviour.

9. Agencies should encourage all their carers to stop smoking. Stopping smoking will protect not only the health of children but also the health of their carers. Agencies have a primary responsibility to ensure that where a relationship is established between a child and a carer, this is maintained for as long as the child needs it. It is a tragedy for a foster carer or adopter to be unable to continue to care for a child who has already experienced significant loss because of preventable illness or premature death. Agencies can support smoking cessation by:
   - providing information on the effects of passive smoking in children;
   - providing information on the effects of smoking on child and adult health;
   - providing regular training and information for fostering, adoption and permanency panels;
   - advertising and signposting carers to local and national NHS services for stopping smoking;
   - discussing smoking risks as a routine part of the recruitment process and at every foster carer review;
   - giving consideration to the smoking habits of other family members and friends who visit regularly, e.g. grandparents or older children who no longer live at home should also be part of these discussions.

10. E-cigarettes are not the same as cigarettes containing tobacco and are often used by people when quitting smoking.

    If carers or other family members are using e-cigarettes, they should be advised to do so only when children (of all ages) are not present. Ideally, carers will not be using e-cigarettes.

    **This position will be reviewed regularly as new research evidence becomes available.**

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11. Fire safety: carers who smoke should receive extra information about the risks of burns and fires from smoking.

Poorly made or counterfeit chargers for e-cigarettes have caused house fires. Carers need to be advised to buy e-cigarettes only from reputable outlets, use the correct charger for the device, and not to leave an e-cigarette charging unattended or overnight (Royal Society for the Prevention of Accidents, 2014).

12. E-cigarette liquid should always be kept out of reach of children. There is a risk of poisoning from e-cigarette liquid, and this can be serious if large amounts are swallowed, especially by young children (Royal Society for the Prevention of Accidents, 2014).

13. Local authorities and other fostering service providers should move progressively to a situation where children are placed only in smoke-free homes. This will not only improve the health of some very vulnerable children but will protect the agencies from potential legal action in the future.

14. Social workers should carefully consider the importance of promoting non-smoking and the positive messages that they convey to young people. They should actively help all looked after children who smoke to stop smoking.

Social workers and support/key workers who smoke need to ensure that they are not promoting smoking by default through their behaviour. They should ensure that they do not smoke immediately prior to meeting children or young people, share lighters, etc. They should be aware that witnessing e-cigarette usage may influence children.

**Final comments**

Many agencies will have already implemented most of the recommendations contained in this Practice Note. For others, the guidance may represent a significant challenge. It is recognised that agencies continue to struggle with the recruitment of adopters and foster carers and the recommendations in this Practice Note are not intended to add to those difficulties. However, we believe that, in the best interests of children, all agencies and adults who care for children separated from their birth families have a primary responsibility to ensure that what is now well established in the scientific and health community is reflected in practice.

This Practice Note is written with the intention of ensuring that what we do is always in the best interests of the health of vulnerable children.

**Bibliography**


