



Environmental inequalities and their impact on the health outcomes of children and young people

Policy and Evidence Briefing

September 2012

This National Children's Bureau briefing summarises key evidence and policy developments in relation to environmental inequality and its impact on children and young people's health. It also analyses, for a range of factors, the policy levers and context for tackling this impact. It is intended as a tool for all those working locally and nationally to promote health equality.

Contents

Introduction.....	3
Access to green space and the natural environment.....	4
Housing.....	6
Fuel poverty.....	8
Transport.....	10
Exposure to poor diet, tobacco, drugs and alcohol.....	12
The school environment.....	15
Spatial and community planning.....	16
References.....	20

Introduction

“The more deprived the neighbourhood, the more likely it is to have social and environmental characteristics presenting risks to health. These include poor housing; higher rates of crime, poorer air quality, a lack of green spaces and places for children to play and more risks to safety from traffic... Creating a physical environment in which people can live healthier lives with a greater sense of well-being is a hugely significant factor in reducing health inequalities.... Investing public funds in measures such as active travel, promoting green spaces and healthy eating will impact positively on health as well as on carbon emissions.”

The Marmot Review¹ pp78-81

Environmental inequalities may be defined as the unequal impact of environmental influences on health and wellbeing. These environmental influences may include healthy early years/education/care settings, housing, public spaces, environmental planning, travel and transport, access to nature and environmental problems arising from unsustainable lifestyles and climate change such as poor air quality or increased heating costs.

From a conceptual point of view, it may be helpful to distinguish environmental inequalities from economic inequalities, such as variations in household income and the state of the jobs market, and from developmental inequalities, such as variations in parenting and teaching styles. This briefing also does not look at broader social issues that make up the environment that children and young people grow up in, such as levels of crime or cross-generational unemployment. This theoretical categorisation is not intended to suggest that all of these factors do not have complex interrelationships.

Environmental inequalities as a category of health determinant

	Social determinants of health			
Access to health services	Developmental inequalities	Environmental inequalities	Wider social aspects of the environment	Economic inequalities
Effectiveness of health protection and healthcare services	Parenting Curriculum Teaching	Covered by this briefing	Crime Cross-generational unemployment	Welfare policy National and global economy and economic structure

The Marmot Review Team found a number of key areas where socio-economic status correlated with environmental disadvantage: transport, green space, pollution, food, housing and community participation and social isolation. In the least deprived areas, over 70% of the population experience no unfavourable environmental conditions, compared to less than 30% in the most deprived areas. In fact, in the most deprived areas, approximately 45% of the population experience two or more unfavourable conditions, compared to less than 5% in the least deprived areas. The relationship between deprivation and unfavourable environmental conditions holds true across the social gradient.²

The reforms introduced by the Health and Social Care Act 2012^a offer an opportunity for local authorities to think about health in all that they do, particularly with their new duties to improve and promote the health of their local population. The establishment of Health and Wellbeing Boards to undertake strategic needs assessment and planning of local services should also serve to facilitate cross agency working to tackle the social determinants of health such as environmental inequalities.

There should also be more opportunities for communities, including children and young people to have a say in this agenda. Health and Wellbeing Boards and health commissioners have duties to involve the public in their planning, with Healthwatch also playing their role in representing patients and the public. Local authorities, who will have an influence on all of the issues in this briefing to some extent, have a duty to consult representatives of taxpayers and service users as to how the local authority should 'make arrangements to secure continuous improvement in the way in which its functions are exercised, having regard to a combination of economy, efficiency and effectiveness'^b. Furthermore, legislation is clear Healthwatch's remit can include giving views on the steps taken by local authorities to protect and improve the health of the population.

Access to green space and the natural environment

Impact on health inequalities

There is evidence that living close to areas of green space such as parks, woodland and other open spaces, can improve health, regardless of social class.³ Numerous studies⁴ point to the direct benefits of green space to both physical and mental health and wellbeing. A 2009 study, for example, examined the difference between green space being three kilometres or one kilometre from one's home, and found that having green spaces within one kilometre reduced disease prevalence.⁵

The presence of green space also has indirect benefits such as providing space for physical activity and play and improving air quality.⁶ Children's physical activity levels are increased when they live closer to parks, playgrounds, and recreation areas.⁷

The Marmot review also highlights the importance of the quality of green space, pointing out that some groups, including children, can feel excluded if spaces are not designed appropriately and that poor maintenance or cleanliness can impact more widely on perceptions of safety.

^a For more detail on how particular aspects of the health and public health reforms may impact children and young people and the children and young people's sector, see earlier briefings from NCB on these topics. <http://www.ncb.org.uk/health/resources-and-publications/policy-briefings>

^b Section 3 of the Local Government Act 1999. Statutory guidance is available here <http://www.communities.gov.uk/publications/localgovernment/bestvaluestatguidance>

Green space in government public health policy

The Public Health White Paper, *'Healthy Lives, Healthy People'*⁸ frequently refers to access to green space as an influencer of the health and wellbeing of communities (see esp. paras. 3.34-3.37). It links this to additional measures to promote active sport.

The Call to Action on Obesity⁹ suggests local authorities should use opportunities to ensure the widest possible access to opportunities to be physically active through the use of parks and other outdoor spaces, as well as drawing upon sport and leisure services.

An indicator of utilization of green space for exercise/health reasons is included in the Public Health Outcomes Framework. Although the current measure for this only records this for those aged over 16, the Children and Young People's Health Outcomes Forum has recommended that, along with other indicators, this is adapted to record to include children and young people.

Overview of wider relevant policy

Promotion of access to green space is a theme in several aspects of government policy and initiatives. The Localism Act, for example, will allow communities to identify land as **Local Green Space** and protect it from development. The Housing Strategy, meanwhile, discusses how homes and neighborhood can incorporate positive opportunities for biodiversity and green infrastructure, including through the Green Flag Award for high quality public spaces. Green Infrastructure is also a theme that many local areas involved in the **Total Environment** initiative are developing.¹⁰

The **National Planning Policy Framework** (NPPF) states that planning policies should be based on robust and up-to-date assessments of the needs for open space, sports and recreation facilities and opportunities for new provision. Existing open space, sports and recreational buildings and land should not be rebuilt on unless it can be shown to be surplus to requirements, it is being replaced by equivalent or better provision or the development is for alternative, needed, provision. The definition of sustainable development includes an environmental dimension, protecting and enhancing our natural, built and historic environment, alongside social and economic ones. The NPPF also states that planning authorities should set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure.

The **Natural Environment White Paper (2011)** proclaims that "a healthy, properly functioning natural environment is the foundation of sustained economic growth, prospering communities and personal wellbeing". It sets out measures aiming to "mainstream the value of nature" across society. These include: the creation of **Local Nature Partnerships** to work at a strategic scale to improve the range of benefits and services from the natural environment; establishing a national Green Infrastructure Partnership to consider how green infrastructure can be enhanced to strengthen ecological networks and improve communities' health, quality of life and resilience to climate change; facilitating outdoor learning; and publishing a revised **Sustainable Lifestyles Framework** to set out best practice for local and national government and their partners to influence behavior in relation to environmental issues.

Conclusions

Access to green space and the natural environment has a clear impact on health inequalities, and this appears to be well recognised in many aspects of national policy.

However, changes to the national planning framework may make it easier for green space to be built on, while local councils' budgets for maintaining local parks will be under pressure due to the economic climate.

Those working to promote health equality may want to consider how green space can be protected where it exists and promoted in the design of new developments, so that those children and young people most at risk of poor health outcomes have the opportunity to access it. Local nature partnerships and the new mechanism to designate areas 'local green space' will be useful levers. It will also be important to highlight the health benefits of access to green space and the relevant sections of the National Planning Policy Framework to local authorities to promote the use of local development plans to secure well targeted access to green space and the natural

More information

The Natural Environment White Paper - The natural choice: securing the value of nature (2011) <http://www.defra.gov.uk/environment/natural/whitepaper/>

Get the green space you want: How the Government can help. Localism Act 2011 <http://www.communities.gov.uk/documents/communities/pdf/2203637.pdf>

CABE - Community green: using local spaces to tackle inequality and improve health <http://www.designcouncil.org.uk/our-work/CABE/Resources/CABE-publications/Community-Green/>

Healthy Places - Resource from the National Heart Forum highlighting areas of law that have the potential to change local environments. See especially "Preserving green spaces" <http://www.healthyplaces.org.uk/>

environment.

Housing

Impact on health inequalities

The quality of housing a child lives in can affect their health in many ways, with overcrowding, insecurity and the poor physical condition of housing, as well as fuel poverty (discussed below) all posing risks. A study carried out by Shelter in 2006 suggested that children in bad housing conditions are more likely to have mental health problems, such as anxiety and depression, to contract meningitis, have respiratory problems, experience long-term ill health and disability, experience slow physical growth and have delayed cognitive development.¹¹

The space available within a home can also impact on other wider health determinants. Educational attainment, for example, can be hindered where there is insufficient quiet, warm space for children to do their homework and familial relationships can be affected by the level of privacy available.¹²

Housing in government public health policy

Statutory Homelessness is included as an indicator in the Public Health Outcomes Framework¹³. Housing quality does not feature as a theme in the Public Health White

Paper, except in relation to fuel poverty (discussed below), although there have been various relevant policy developments set out in other recent government documents.

Overview of wider relevant policy

The key focus of the government's **Housing Strategy (2012)** is to "get the housing market - and in particular new house building – moving again". It also covers a range of measures to reform social housing, housing support, and to reduce CO₂ emissions from homes.

There are notable changes outlined with regard to how those who may struggle to afford adequate housing, such as families with low incomes, are supported. The most significant of these probably being the reduction of money spent on Housing Benefit, including changes to the Local Housing Allowance, effective from April 2011, and changes to how housing benefit is calculated for working age tenants – based on need rather than the house in which someone happens to be living. Housing Benefit will also be subsumed within the new Universal Credit from 2013. The measures set out also include: encouraging the role-out of the No Second Night Out across the country, with £20million VCS funding to support this and; Encouraging housing associations and private landlords to help identify families in need of intensive support

The strategy also sets out reforms which will affect how access to social housing can be targeted and controlled. Councils will no longer have to maintain an 'open' housing list (waiting list for social housing) and they will be able to introduce their own criteria. Reasonable preference criteria for those in greatest need would be maintained and guidance will discourage allocation of social homes to people who already own suitable accommodation or have high earnings. It is suggested that councils use these new freedoms to introduce criteria to their housing lists relating to employment and other contributions to the local community. They will also be able to give new social tenants shorter tenancy terms (rather than lifetime tenancy), to discharge their homelessness duty by offering private rented accommodation and more easily evict people for housing related anti-social behaviour.

The Housing Strategy also refers to energy efficiency in the home and access to green space (see sections on fuel poverty and access to green space and the natural environment)

The **National Planning Policy Framework (2011)** (see section on spatial and community planning) sets out how local planning authorities should help to deliver a wide choice of high quality homes. This includes:

- ▶ Setting out a housing implementation strategy for the full range of housing (including market and affordable) describing how they will maintain delivery of a five-year supply of housing land to meet their target.
- ▶ Setting out the approach to housing density in the local area plan.
- ▶ planning for a mix of housing based on current and future demographic trends and the needs of different groups in the community such as families with children (and others)

Conclusions

It is clear that housing is a key determinant of health and there a wide-ranging changes to housing policy occurring. While recent housing policy is largely aimed at improving the targeting of housing support, the quality of homes and social mobility, there are also potentially large reductions in the level of support for some families. The overall impact on health inequalities in children and young people could perceivably be positive or negative. There is a clear imperative for those campaigning

to reduce health inequalities in children and young people to remain vigilant in this area, not least because of the apparent absence of housing issues from the government's public health strategy.

It will be important to encourage housing authorities to consider the needs of children when exercising their new freedoms in the management of social housing. With the decline in the role of social housing in housing the most vulnerable potentially set to continue, it will also be crucial that local authorities use their wide powers to tackle poor housing in privately rented accommodation as well.^c

Communities may become more transient as a result of higher turnover in social housing and people having to move to live where they can afford. The interest of such sections of society may need to be safeguarded where they are at odds with the disproportionate influence of those with more permanent residence, who may have more capacity to get involving in the planning of local services and development.

More information

Laying the Foundations: A Housing Strategy for England

<http://www.communities.gov.uk/publications/housing/housingstrategy2011>

Fuel poverty

Impact on health inequalities

Cold housing is a health risk. A focused review of the evidence by the Marmot Review team found that Significant effects on the physical health of the young were evident, especially in terms of infants' weight gain, hospital admission rates, and caregiver-rated developmental status, as well as self-reported reduction in the severity and frequency of children's asthmatic symptoms.¹⁴ Children living in cold homes are more than twice as likely to suffer from a variety of respiratory problems than children living in warm homes.¹⁵ More than one in four adolescents living in cold housing are at risk of multiple mental health problems compared to one in 20 adolescents who have always lived in warm housing¹⁶ and infants living in fuel poor homes are 30 per cent more likely to be admitted to hospital or primary care facilities.¹⁷

According to the World Health Organisation, an adequate standard of heating in the home is 21°C in living areas and 18°C in bedrooms. A family is considered 'fuel poor' if they need to spend more than 10 per cent of their income to meet that standard and keep their home warm. Government are consulting on the design of a more specific measure for use in the UK.

Where people are have to use more fuel to heat their homes, this also means that more CO₂ emissions are being created, contributing to climate change. If a family is managing to afford to heat the homes, fuel poverty may still be affecting them if they have to cut back on essentials such as food and clothing to do this.

The risk of fuel poverty is higher for some of the most vulnerable children and young people. It rises sharply as household income falls.¹⁸ Almost a third of households with a disabled child and where no one works have gone without heating because they cannot afford it¹⁹ and over a quarter of lone parent families are fuel poor²⁰. A 2012

^c Such as under the 2000 and 2004 Housing Acts

survey of Barnardo's services also suggested that along with families with young children, many disadvantaged young people in the 16 to 24 age group who are living independently are struggling to pay their fuel bills and living in cold homes.²¹

The risks of fuel poverty are also higher in rural areas²² and for those in private rented accommodation, although the prevalence of home ownership means that the majority of the fuel poor live in owner-occupied accommodation.²³

There is evidence that home insulation can improve physical and mental wellbeing including reducing respiratory problems²⁴ and that adequate heating systems improve asthma symptoms in children and reduce the number of days off school.²⁵

Fuel poverty in government public health policy

There is an indicator on fuel poverty included in the Public Health Outcomes Framework and the Public Health White Paper identifies keeping homes warm as an area for action. Measures that have the potential to reduce fuel poverty feature in more detail in policy relating to tackling climate change.

Overview of wider relevant policy

The **Hills Fuel Poverty Review**, commissioned by government to take a fresh look at the fuel poverty target and definition, published its final report in March 2012.²⁶ It concluded that fuel poverty is a distinct and serious problem from several perspectives, that government should adopt a new approach to measuring it, based on directly measuring the overlap between low income and high costs and taking into account energy needs, and that government should set out a renewed and ambitious strategy for tackling fuel poverty. Government are consulting²⁷ on a new, high cost, low income based measure of fuel poverty to help target interventions, but propose to continue reporting on the 10% (WHO) definition in addition.

The Climate Change Act 2008 commits the UK government to reducing the UK's carbon emissions by 34% by 2020 and by 80% by 2050 (against a 1990 baseline). The **Carbon Plan (2011)**, sets out the government's plans for achieving the emissions reductions committed to in the first four carbon budgets target.²⁸ It includes actions from across government, mostly at a national level, many of which are listed elsewhere in this document but also including measures to improve the information available to people on energy consumption such as the roll out of smart meters and the improvement of Energy Performance Certificates (which give information on the energy efficiency of buildings).

The **Green Deal**, launching in late 2012, will enable companies to offer energy efficiency improvements to homes, paid for through additions to energy bills for the property. From April 2016, private landlords will not be able to refuse reasonable requests from tenants for such work to be carried out. This will sit alongside an **Energy Company Obligation (ECO)**, which will set targets for companies to deliver energy efficiency measures, in particular for hard to treat homes and households at risk of fuel poverty. It is expected that Green Deal providers will also offer brokerage to access this support. These measures replace the Carbon Emissions Reduction Target (CERT) and the Community Energy Saving Programme (CESP), the latter of which was an area based programme, working in partnership with local authorities. Guidance to English Energy Conservation Authorities published in July 2012 sets out how government expects local government to promote energy conservation in houses in their areas, including local promotion of the Green Deal.

The Housing Strategy sets out plans to require all new houses coming through the planning system from 2016 to meet a **Zero Carbon Standard** (through energy efficiency, installation of solar panels, and developers offsetting remaining carbon

footprint by investing in things like district heating schemes). Government also plans to introduce regulations so that from April 2018, it will be unlawful to rent out a residential or business premises that does not reach a minimum energy efficiency standard^d (the intention is for this to be set at EPC rating 'E').

Chapter 10 of the National Planning Policy Framework (see section on planning, above) looks at climate change, setting out that planning authorities should plan for new development in ways which reduce emissions, support energy efficiency improvements to existing buildings.

Conclusions

As an aspect of housing, energy efficiency and fuel poverty has a considerable impact on health outcomes and health inequalities in children. It will be important to promote action on this as a public health, as well as a climate change, issue, to help ensure support is targeted at those most at risk of health inequalities.

Local authorities will need to get to grips with their new role within the Green Deal, and alongside other partners, including the voluntary sector, promote take up of energy efficiency improvement by households where the most disadvantaged children live.

While changes to the definition of fuel poverty may improve understanding of how it is affecting those most need, it will be important that during the transition period, the issue is not given lower priority by local and national bodies.

NCB supports the Energy Bill Revolution campaign which asks the government to reinvest the money it receives from carbon taxes to make our homes super energy-efficient.

More information

NCB: Fuel Poverty and Child Health and Wellbeing <http://www.ncb.org.uk/sustainable-lifestyles/fuel-poverty-and-childrens-health>

Save the Children: The Impact of Fuel Poverty on Children
<http://www.savethechildren.org.uk/resources/online-library/the-impact-of-fuel-poverty-on-children>

The Green Deal

http://www.decc.gov.uk/en/content/cms/tackling/green_deal/green_deal.aspx

Guidance on the Home Energy Conservation Act 1995 (including local authorities role in the Green Deal)

<http://www.decc.gov.uk/assets/decc/11/tackling-climate-change/saving-energy-co2/5992-guidance-to-english-energy-conservation-authorities.pdf>

Transport

Impact on health inequalities

Transport impacts on health and wellbeing in a number of ways. It accounts for around 29% of CO₂ emissions and has further impacts on the air quality for people living near infrastructure. Good transport can help people access opportunities and

^d Using new powers under the Energy Act 2011

facilities that help them to stay healthy, such as leisure centres and parks. The way in which a child or young person travels can also impact on their health, with greater opportunities for safe walking and cycling – active travel - being key.

The Marmot Review suggests that the impact of transport on health inequalities is most significant when looking at deaths from road traffic injuries. Children in the 10 per cent most deprived wards in England are four times more likely to be hit by a car than children in the 10 per cent least deprived wards.²⁹ Road deaths, especially among pedestrians and cyclists, are particularly high among children of parents classified as never having worked or as long-term unemployed.³⁰ Research studies have concluded that 20 mph zones could have halved the number of casualties (580 deaths in one year) in the most deprived quintiles.³¹

The number of children walking to school is declining, decreasing from 49 per cent in 2000 to 41 per cent in 2010.³² This suggests action is needed to get children to use more active modes of travel. There is also an argument for investing in the provision of cycling infrastructure, with evidence that it can lead to a long-term increase in cycling and a reduction in cycle casualties.³³

Good public transport has the potential to enable children and young people to access a wider range of destinations and facilities, particularly for those in deprived areas where there are fewer development opportunities and where parents may be less able to provide private transport on demand. Better public transport has been shown to result in significant changes in travel patterns and health improvements.³⁴

Transport in government public health policy

The Public Health White Paper stresses that active travel and physical activity need to become the norm in communities, and states that the Department of Health will support local areas by providing good evidence on how to make regular physical activity easier for their populations. Similarly, the Call to Action on Obesity³⁵ stresses promotion of active travel as a key lever for local authorities to exercise, for example, by ensuring that Local Transport Plans maximise the potential to encourage walking and cycling and other forms of active travel.

The issue of road safety is recognised in the Public Health Outcomes Framework which includes an indicator on the number of people killed or seriously injured on England's roads.

Overview of wider relevant policy

Local authorities are required to develop a Sustainable Modes of Travel Strategy setting out how they will meet the transport needs of children and young people going to and from school in the area, maximising the potential to promote and utilise sustainable modes of travel. Guidance on wider Local Transport Plans³⁶ (which local authorities are required to produce) stresses the importance of the role of local transport planning in promoting equality of opportunity and contributing to safety, security, health, quality of life and a healthy natural environment. Accessibility Guidance also sets out how the accessibility problems faced by people from disadvantaged groups and areas can be identified and addressed.³⁷

The **Local Transport White Paper (2011)** sets out a vision “for a transport system that is an engine for economic growth, but one that is also greener and safer and improves quality of life in our communities”. It focuses on: giving local authorities and local enterprise partnerships more freedom in planning transport in their areas, replacing a number of specialist funded programmes (including those aimed at

schools) with a Local Sustainable Transport Fund, and a range of national measures with the transport industries to make public transport more attractive.

The **Local Sustainable Transport Fund** is intended to enable the delivery by local transport authorities of sustainable transport solutions that support economic growth while reducing carbon.³⁸ A Growing Places Fund³⁹ is also allocated to local enterprise partnerships to spend on new infrastructure projects aimed at boosting economic growth.

Chapter 4 of the National Planning Policy Framework sets out how local planning should promote sustainable transport

Conclusions

Transport is key in providing children and young people access to opportunities and facilities, determining their level of regular physical activity, and in keeping children safe on their local streets. While the Transport White Paper heralded a more local approach to transport planning this is still within a framework where the health and wellbeing needs of communities, including children and young people, need to be taken into account.

The messages of current national policy may need to be complemented to encourage local partners to consider the full range of effects transport can have on health inequalities in children. Promoting road safety as a public health issue affecting disadvantaged communities will be important as national policy appears quiet on this. As the Local Sustainable Transport Fund can be accessed for a range of improvements, proposals that can benefit children and reduce health inequalities should be encouraged.

More information

Local Transport White Paper: Creating Growth, Cutting Carbon Making Sustainable Local Transport Happen

<http://www.dft.gov.uk/publications/making-sustainable-local-transport-happen/>

Healthy Places

Resource from the National Heart Forum highlighting areas of law that have the potential to change local environments. See especially "Enabling active travel"

<http://www.healthyplaces.org.uk/>

Exposure to poor diet, tobacco, drugs and alcohol

Impact on health inequalities

The Marmot Review highlights some of the extensive evidence of a social gradient to behavior relating to alcohol, tobacco, drugs and diet. While the causes in differences in behavior will be wider ranging and complex, there will be some local tools such as licensing and planning which can control access to environments which may promote unhealthy lifestyle choices, such as poorly managed clubs and bars, and the disproportionate consumption of unhealthy foods.

Obesity is associated with social and economic deprivation across all age ranges and is becoming increasingly common. Furthermore, five per cent of people on low incomes report skipping meals for a whole day.⁴⁰ Availability of healthy food, and in particular fresh produce, is often worse in deprived areas due to the mix of shops that tend to

locate in these neighbourhoods.⁴¹ Such evidence may suggest that residents of deprived areas could benefit from policies aimed at low-mobility groups, increasing their access to better shopping facilities and healthier food alternatives.

While people with lower socioeconomic status are more likely to abstain from drinking alcohol altogether, if they do consume it, they are more likely to have problematic drinking patterns and dependence than the better off.⁴² This appears to apply just as much to young people, with a survey of 15–16 year olds in the North West reporting that binge drinking was more common among those living in deprived areas.⁴³

Smoking is more prevalent in households with lower economic status and reductions in the rate of smoking in recent years appear to be of similar proportions across the social gradient.⁴⁴

There is a significant positive correlation between the prevalence of problematic drug users aged 15–64 years and the deprivation indices of a local authority. Similarly, admission rates for drug specific conditions for both males and females show a strong positive association with deprivation.⁴⁵

Diet, alcohol, drugs and tobacco in government public health policy

The Public Health White Paper suggests that diet will be influenced through personal social health and economic education (PSHE) in schools, and evidence from DH to support local areas to make healthy choices easier for example by sharing learning from the experiences of the nine 'Healthy Towns'.

The White Paper also pledges that the Home Office will seek to overhaul the Licensing Act to give local authorities and police stronger powers to remove licences from, or refuse licences to, any clubs, bars and pubs that are causing problems, close any shop or bar found to be persistently selling alcohol to children and charge more for late-night licences. It refers to government's role in protecting children from tobacco and alcohol and the Home Office's commitment to implementing a ban on selling alcohol below cost.

Many relevant indicators are included in the Public Health Outcomes Framework including excess weight in 4-5 and 10-11 year olds, smoking prevalence in 15 year olds, tooth decay in children aged 5 and alcohol-related admissions to hospital, as well as a 'placeholder' for recording healthy diet in the future.

The Call to Action on Obesity highlights the option of the most of local authorities taking steps to use existing planning levers to limit the growth of fast food takeaways, for example by developing supplementary planning policies, and suggests that they should work with local businesses and partners to increase access to healthy food choices

Overview of wider relevant policy

In 2011 a **Public Health Responsibility Deal** was launched. Organisations, including businesses and those in the voluntary sector, signing up to the Responsibility Deal commit to taking action voluntarily to improve public health through their responsibilities as employers, as well as through their commercial actions and their community activities. Collective pledges have been made regarding alcohol, food, health at work and physical activity

In December 2010 a **Drugs Strategy**, '*Reducing demand, restricting supply, building recovery: supporting people to live a drug-free life*' was published, which outlines broad areas of activity to reduce substance misuse amongst children and young

people. This includes a focus on information and education via the FRANK service, early intervention, and intensive support for young people who misuse drugs

In March the government's **Alcohol Strategy** was launched, which includes plans to promote responsible product placement, work with the Advertising Standards Agency and Ofcom to ensure that alcohol is not advertised during programmes popular with young people and work with parents and carers, as co-educators of children and young people, as well as setting minimum prices for alcohol.

Consultations on standardised front-of-pack labelling for showing food nutrition information⁴⁶ and standardised tobacco packaging⁴⁷ ended in August.

School food standards set out the range of food that schools are allowed to provide at any time of the day and also set out additional nutritional standards for school lunches. These do not apply to the increasing proportion of schools that are Academies or Free schools

Conclusions

The evidence shows a social gradient in the damage caused by poor diet, alcohol, tobacco and drugs. This is in part reflected in the wide range of measures aimed at promoting healthier choices. Government policy is, at face value, clear that national and local government have a role to play in protecting children and young people from tobacco, alcohol and drugs.

National strategies on such issues, along with debate around potential measures on the pricing of alcohol and plain packaging of cigarettes, should provide useful impetus and promote interest and greater awareness of the issues at a local level. This could help local campaigns for measures such as tighter licensing regimes, control of alcohol consumption and smoking and drug use prevention where this can benefit the health of the most disadvantaged children.

Local partners may need to take more of the initiative in relation to promoting healthy diets. Access to healthy food will depend on a number of locally influenced factors such as planning permission for takeaways and the availability of transport to access shops that sell healthy food. Health and Wellbeing Boards may need to be encouraged to consider how healthy diets can be promoted, and Directors of Public Health encouraged to work with colleagues to utilise all levers available at the local level. Academies will also need to be held to account for the quality of food they provide and their promotion of healthy choices through the curriculum.

More information

The Public Health Responsibility Deal - <http://responsibilitydeal.dh.gov.uk/>

The 2010 Drug Strategy - <http://www.homeoffice.gov.uk/publications/alcohol-drugs/drugs/drug-strategy/drug-strategy-2010>

Alcohol Strategy - <http://www.homeoffice.gov.uk/publications/alcohol-drugs/alcohol/alcohol-strategy>

Healthy Places - *Resource from the National Heart Forum highlighting areas of law that have the potential to change local environments. See especially "Access to Healthy Food"*
<http://www.healthyplaces.org.uk/>

The school environment

Impact on health inequalities

Children and young people spend a lot of their time in school so it is inevitable that the nature of the school environment, as well as their academic attainment, will be an influence on their health outcomes. Much evidence⁴⁸ seems to point to the school ethos as an influence of outcomes and to the success of health promoting schools programmes such as Healthy Schools, which include PSHE and schools' wider approaches to encouraging healthy behaviours.

There is also evidence that the design of school premises themselves can impact on health, for example marking school playgrounds with designs that stimulate active games is associated with a 20 per cent long-term improvement in physical activity. A natural play environment at school also helps reduce bullying, increases creative play, improves concentration and gives children a feeling of self worth.⁴⁹

The length of time that children spend in school – around a quarter to a third of their waking lives – means that the environmental factors relating to the quality of housing will also be relevant to the quality and location of school buildings. High quality school environments can be offered on a universal basis – regardless of the family situations of individual children.

The school environment in government public health policy

The Public Health White Paper stresses an expectation for schools to play a role in improving health, including through teaching PSHE and the continuation of Healthy Schools and Healthy Further Education as voluntary programmes. It suggests that Directors of Public Health will be able to work with children's services, schools and other partners to determine local strategies for improving child health and wellbeing. (Paras 3.14-3.16) The Public Health Outcomes Framework includes outcomes of direct relevance to schools such as pupil absence and 16-18 year olds not in education, employment or training, but schools will also play a key role in wider outcomes such as physical activity, access to green space and smoking levels.

Overview of wider relevant policy

The 2011 **Schools White Paper** sets out the government's vision for children and young people's education, which has a strong focus on teaching, discipline and improving academic attainment and preparation for work. There is also a strong theme of increasing school autonomy. The number of Academies, which are not subject to local authority oversight or as many regulations as maintained schools, has risen from 203 in January 2010 to over 2300 in September 2012.

Whilst relevant statutory guidance has been revoked, all schools, including Academies, still have a duty to cooperate with local partners to promote the wellbeing of children.^e

The White Paper also announced plans to simplify planning regulations to make it easier to set up schools in buildings that have been used for different uses, which could impact on the environment of those new schools. Since then the national planning framework has been changed so that there is a presumption in favour of the development of new state schools, and ministerial guidance encourages local authorities to use their powers to support applications. Regulations on standards for school premises specify minimum standards for all maintained schools in England. Government propose to simplify or remove some of these regulations⁵⁰, including

^e Under Section 10 of the Children Act 2004

those on the amount of outside space schools have to provide. They do not apply to the increasing number of Academies or Free Schools.

The Ofsted school inspections framework⁵¹ has been simplified, compressing the inspection into a smaller number of topics and including less consideration of children's health and their wellbeing as a whole.

Prior to March 2011 **Healthy Schools** was a nationally lead programme through which schools could achieve nationally recognised healthy school status. It required schools to meet criteria in four core themes. The four themes were personal, social and health education including sex and relationship education and drug education; healthy eating; physical activity; and emotional health and wellbeing.⁵² Some local authorities are taking over leadership of the programme in their area and providing local recognition of schools' achievements.⁵³

Conclusions

The evidence on the role of schools in reducing health inequalities looks at the environment that they provide in the widest sense, including school ethos, the promotion of healthy lifestyles through the curriculum and extended services. The physical environment will also be important owing to the amount of time children and young people spend there.

Focus on teaching and discipline has, to some extent, drawn national policy attention away from how the wider school environment can influence children and young peoples' outcomes. While public health policy recognises that schools can influence health and wellbeing, representation from the increasing number of Academies will not be required on Health and Wellbeing Boards. Schools will need to be encouraged to get involved, highlighting their existing duty to cooperate with partners to promote children's wellbeing.

It will be important to encourage local partners to maintain momentum on promoting schools' contribution to health and wellbeing, including through voluntary schemes such as Healthy Schools and Eco Schools. Vigilance may also be needed to ensure that new flexibilities in relation to school premises do not lead to children being taught in unhealthy environments. It will be important that access to green space, natural light and safe routes to and from school, for example, are maintained for all pupils.

More information

The Schools White Paper: The importance of teaching

<https://www.education.gov.uk/publications/eOrderingDownload/CM-7980.pdf>

Department for Education – Building and Design

<http://www.education.gov.uk/schools/adminandfinance/schoolscapital/buildingsanddesign>

Eco Schools

Programme managed by Keep Britain Tidy through which schools can work towards internationally recognised awards for their promotion of sustainability

<http://www.keepbritaintidy.org/ecoschools/>

Spatial and community planning

Impact on health inequalities

The Marmot review suggests that the lack of attention paid to health and health inequalities in the planning process can lead to unintended negative consequences.⁵⁴ The Marmot Review team has identified transport, green space, pollution, food and housing all as issues that can be influenced by spatial planning. They also highlight how social isolation can be heightened by the physical environment. For example, a lack of safe street crossings and poor quality of public spaces can stop many vulnerable people from leaving the home to meet their neighbours or use local shops and other services.⁵⁵

People are more likely to be physically active if they live in neighbourhoods with many places to go to, such as shops and other facilities, and designing neighbourhoods well can better enable people to walk or cycle to destinations.⁵⁶ Issues such as quality of housing people live in, the level of pollution and their access to services and healthy food can also be influenced through setting clear local plans on what development is to be permitted or encouraged and where, and negotiating with developers through the planning process. The more detailed mechanics of the health levers in planning are highlighted by various reports and resources from the NHS London Healthy Urban Development Unit and the Commission for Architecture and the Built Environment (CABE).

Spatial and community planning in government public health policy

The Public Health White Paper states that health considerations are an important part of planning policy (page 48, paragraph 3.59). The Call to Action on Obesity suggests that local authorities make the most of the potential for the planning system to create a healthier built environment – for example, by ensuring that buildings and spaces are designed in a way that makes it easy for people to be active. Ministers have made the decision, however, to discontinue NICE guidance on spatial planning for health, which was to focus on how to ensure opportunities to improve health and reduce health inequalities are fully considered as part of the planning process.⁵⁷

Overview of wider relevant policy

The **National Planning Policy Framework**^f (NPPF) was updated in March 2012, promoting ‘presumption in favour of sustainable development’ (meaning it will need to be clearer than before why an individual application is being turned down) and also having a strong focus on the role of planning in promoting economic development. While it defines sustainable development in terms of its economic, social and environmental role, it then continues to give more focus on the economic role throughout the body of the guidance. Having said this, there are key messages in the NPPF that could promote the consideration of health inequalities in the planning process. Included in the 12 core planning principles, for example, are suggestions that planning should:

- ▶ “Take account and support local strategies to improve health, social and cultural wellbeing for all”;
- ▶ “Contribute to conserving and enhancing the natural environment and reducing pollution and”; and
- ▶ “not simply be about scrutiny but instead be a creative exercise in finding ways to enhance and improve the place in which people live their lives”.

^f Planning law requires that applications for planning permission must be determined in accordance with the local development plan. The National Planning Policy Framework is statutory guidance for local planning authorities (i.e. local authorities but for two tear areas this would be the district/borough as opposed to the County for children’s services and HWBs) for drawing up these plans and making decisions about individual planning applications.

There is also a dedicated section of the guidance on “Promoting Healthy Communities” which includes recommendations planning accessible environments and public spaces and working with public health leads and health organisations to take account of the health needs of the local population. It suggests that planning authorities should aim to involve all sections of the community in the development of Local Plans.

The **Localism Act 2011** has made a number of changes to local planning law coming into force from April 2012. This includes the introduction of the community right to build, neighbourhood development orders and neighbourhood development plans. These introduce a new mechanism for parish councils, neighbourhood forums (see below), and community organisations⁹ to get planning permission for local developments without going through the normal planning process. Plans approved through these channels will be subject to local referenda and examination by the planning authority^h in terms of sustainable development and compatibility with the local area plan. The NPPF says that local development plans should include priorities from any neighbourhood plans

The Localism Act also introduces a requirement for consultation on large developments at the pre-application stage and makes it easier to get developers to pay for new local infrastructure and services.

The wider strategic planning of local communities led by Local Authorities is being deregulated. Local authorities and their partners no longer have to prepare Local Area Agreements, and statutory guidance⁵⁸ on the development of Sustainable Community Strategies has been revoked in preparation for the abolition of the duty to produce such strategies. In any given local authority area, the Sustainable Community Strategy (SCS) was intended to be the overarching plan for promoting and improving the well-being of the area. While new Joint Health and Wellbeing Strategies may, to some extent, replace the function of the SCS, they will have a narrower focus on health and social care services and a smaller range of local agencies will be required to engage in the process and have regard to the strategy. Some areas will still have an active SCS, drawn up before these policy changes have come into effect.

Conclusions

The influence that spatial planning can have on a wider range of factors, taken together with the extent of change in the planning system, means that this is a key area to pay attention to in tackling environmental inequalities affecting the health of children and young people. The strength and clarity of local development plans will be crucial to ensuring that the presumption in favour of sustainable development and measures around neighbourhood planning do not lead to inappropriate development. It will be vital that such plans have consideration of the potential impact of environmental inequalities built into them. While the new National Planning Policy Framework may be interpreted as particularly permissive, it also contains key guidance on considering health and wellbeing, which may need to be highlighted to local planning authorities.

⁹ A community organisation is an organisation which is “established for the express purpose of furthering the social, economic and environmental well-being of individuals living, or wanting to live, in a particular area” and meets requirements in relation to this to be set out in regulations. A community development order made in response to a proposal from a community organisation will be known as a community right to build order

^h A planning authority is a local authority with particular planning responsibilities and in the case of these measures refers to district councils where there are district and county councils and also includes national park authorities

There may also be an argument for health and wellbeing strategies to consider spatial planning issues. It will be easier for local development plans to consider health and wellbeing if they could refer directly to the relevant part of a local strategy. This was a role that had been played by sustainable community strategies, which there is no longer a requirement to produce.

More information

National Planning Policy Framework

<http://www.communities.gov.uk/publications/planningandbuilding/nppf>

Introduction to neighborhood planning

<http://www.communities.gov.uk/publications/planningandbuilding/introductionneighbourplanning>

NHS London Healthy Urban Development Unit

<http://www.healthyurbandevlopment.nhs.uk/index.html>

CABE - Future health: sustainable places for health and well-being

<http://www.designcouncil.org.uk/our-work/CABE/Resources/CABE-publications/Future-health/>

References

- ¹ The Marmot Review (2010) Fair Society, Healthy Lives: Strategic review of health inequalities in England post 2010 <http://www.instituteofhealthequity.org/projects/fair-society-healthy-lives-the-marmot-review>
- ² The Marmot Review: Implications for Spatial Planning. 2011: London, pp9-15
<http://www.apho.org.uk/resource/item.aspx?RID=106106>
- ³ Mitchell R and Popham F (2008) Effect of exposure to natural environment on health inequalities: An observational population study. *The Lancet* 372(9650): 1655-1660. C.f. Fair Society, Healthy Lives p80
- ⁴ See page 80, /endnote number 206 of Fair Society, Healthy Lives
- ⁵ Maas J, Verheij RA, de Vries S, Spreeuwenberg P, Schellevis FG and Groenewegen PP (2009) Morbidity is related to a green living environment. *Journal of Epidemiology and Community Health* 63: 967–97. C.f Fair Society, Healthy Lives p131
- ⁶ Porritt J, Colin-Thomé D, Coote A, Friel S, Kjellstrom T and Wilkinson P (2009) Sustainable development task group report: health impacts of climate change. Task group submission to the Marmot Review http://www.ucl.ac.uk/gheg/marmotreview/Documents/Sustainable_development_Appendix_II C.f Fair Society, Healthy Lives pp80-81
- ⁷ Davidson K and Lawson C (2006) Do attributes of the physical environment influence children's level of physical activity? *International Journal of Behavioural Nutrition and Physical Activity* 3 (19): 1-17. C.f Fair Society, Healthy Lives p131
- ⁸ Department of Health (2010) Healthy Lives, Healthy People: Our strategy for public health in England http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_121941
- ⁹ Department of Health (2011) Healthy lives, healthy people: a call to action on obesity in England http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_130401
- ¹⁰ Department for the Environment and Rural Affairs: Total Environment initiative <http://www.defra.gov.uk/environment/quality/local/total-environment/>
- ¹¹ Harker L (2006) Chance of a lifetime: The impact of housing on children's lives. London: Shelter. http://england.shelter.org.uk/professional_resources/policy_library/policy_library_folder/chance_of_a_lifetime_-_the_impact_of_bad_housing_on_childrens_lives C.f. Fair Society, Healthy Lives p80
- ¹² CABE (2010), Space standards: the benefits pp5-8
<http://webarchive.nationalarchives.gov.uk/20110118095356/http://www.cabe.org.uk/files/space-standards-the-benefits.pdf>
- ¹³ Department of Health (2012), Healthy lives, healthy people: Improving outcomes and supporting transparency
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_132358
- ¹⁴ Marmot Review Team (2011), The Health Impacts of Cold Homes and Fuel Poverty, p27
<http://www.instituteofhealthequity.org/projects/the-health-impacts-of-cold-homes-and-fuel-poverty>
- ¹⁵ Ibid, p9
- ¹⁶ Marmot Review Team (2011) *The Health Impacts of Cold Homes and Fuel Poverty* London: Friends of the Earth/Marmot Review Team
- ¹⁷ Liddell, C (2008) *The impact of fuel poverty on children* Belfast: Save the Children
- ¹⁸ The poverty site (2009) Fuel poverty summary statistics
<http://www.poverty.org.uk/80/index.shtml#note7#note7> C.f. Fair Society, Healthy Lives p134
- ¹⁹ Contact a Family (2012) *Counting the Costs 2012 The financial reality for families with disabled children across the UK*
- ²⁰ Consumer Focus *Estimated UK fuel poverty levels in November 2011*
<http://www.consumerfocus.org.uk/policy-research/energy/paying-for-energy> (last accessed June 2012)
- ²¹ Barnardo's (2012) *Priced out The plight of low income families and young people living in fuel poverty* Essex: Barnardo's

-
- ²² The poverty site (2009) Fuel poverty summary statistics
<http://www.poverty.org.uk/80/index.shtml#note7#note7> C.f. Fair Society, Healthy Lives p133
- ²³ Glennerster H, Bradshaw J, Lister R, Lundberg O (2009) The report of the social protection task force. Task group submission to the Marmot Review.
http://www.ucl.ac.uk/gheg/marmotreview/consultation/Social_protection_report
C.f. Fair Society, Healthy Lives p133
- ²⁴ Howden-Chapman P and Matheson A et al. (2007) Effect of insulating houses on health inequality: Cluster randomised study in the community. *BMJ* 334:460 C.f. Fair Society, Healthy Lives p134
- ²⁵ Howden-Chapman P, Pierse N, Nicholls S et al. (2008) Effects of improved home heating on asthma in community dwelling children: Randomised controlled trial. *BMJ* 337: a1411. C.f. Fair Society, Healthy Lives p134
- ²⁶ Getting the measure of fuel poverty: Final Report of the Fuel Poverty Review
http://www.decc.gov.uk/en/content/cms/funding/Fuel_poverty/Hills_Review/Hills_Review.aspx
- ²⁷ Fuel Poverty: changing the framework for measurement
http://www.decc.gov.uk/en/content/cms/consultations/fuel_poverty/fuel_poverty.aspx
- ²⁸ The Carbon Plan
http://www.decc.gov.uk/en/content/cms/tackling/carbon_plan/carbon_plan.aspx
- ²⁹ Department for Transport (2009) A safer way – Making Britain's roads the safest in the World.
www.dft.gov.uk/consultations/open/roadsafetyconsultation/roadsafetyconsultation.pdf ; Grayling T, Hallam K, Graham D, Anderson R and Glaister S (2002) Streets ahead – safe and liveable streets for children. London: ippr. <http://www.ippr.org.uk/pressreleases/archive.asp?id=654&fID=59> c.f. Fair Society, Healthy Lives p81
- ³⁰ Office for National Statistics (2002) National Statistics Socio-economic Classification: User Manual. London: Office for National Statistics; Van Lenthe F J, Brug J and Mackenbach J P (2005) Neighbourhood inequalities in physical inactivity: The role of neighbourhood attractiveness, proximity to local facilities and safety in the Netherlands. *Social Science Medicine* 60(4): 763–75; Gorman D, Douglas MJ, Conway L, Noble P and Hanlon P (2003) Transport policy and health inequalities: A health impact assessment of Edinburgh's transport policy. *Public Health* 117(1): 15-24 c.f. Fair Society, Healthy Lives p81
- ³¹ Grundy C, Steinbach R, Edwards P, Green J and Wilkinson P (2008) The effect of 20mph zones on inequalities in road casualties in London: A report to the London Road Safety Unit. London: LSHTM.
<http://www.tfl.gov.uk/assets/downloads/the-effect-of-20-mph-zones-on-inequalities-in-road-casualties-in-london.pdf> c.f. Fair Society, Healthy Lives p129
- ³² Department for Transport (2011) National Travel Survey 2010: Trips to and from school per child per year by main mode: Great Britain- since 1995/97 <http://www.dft.gov.uk/statistics/tables/nts0613/>
- ³³ NICE (2008) Promoting and creating built or natural environments that encourage and support physical activity. London: NICE. <http://www.nice.org.uk/nicemedia/pdf/PH008GuidanceWordv2.doc> c.f. Fair Society, Healthy Lives p129
- ³⁴ Gorman D, Douglas MJ, Conway L, Noble P and Hanlon P (2003) Transport policy and health inequalities: A health impact assessment of Edinburgh's transport policy. *Public Health* 117(1): 15-24. C.f. Fair Society, Healthy Lives p130
- ³⁵ Department of Health (2011) Healthy lives, healthy people: a Call to Action on Obesity in England
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_130401
- ³⁶ Department for Transport (2009), Guidance on Local Transport Plans
<http://www.dft.gov.uk/topics/local-authorities/strategy>
- ³⁷ Department for Transport (2006), Accessibility planning guidance
<http://www.dft.gov.uk/publications/accessibility-planning-guidance/>
- ³⁸ See <http://www.dft.gov.uk/publications/local-sustainable-transport-fund-guidance-on-the-application-process/>
- ³⁹ Department for Communities and Local Government (2011), Growing Places Fund Prospectus
<http://www.communities.gov.uk/publications/regeneration/growingplacesfund>
- ⁴⁰ Dowler E and Dobson B (1997) Nutrition and poverty in Europe: An overview. *Proceedings of the Nutrition Society* 56: 51-62. P81 C.f. Fair Society, Healthy Lives p81
- ⁴¹ Cummins S and Macintyre S (2006) Food environments and obesity—neighbourhood or nation? *International Journal of Epidemiology* 35(1): 100-104; Friel S, Walsh O and McCarthy D (2006) The irony

of a rich country: Issues of access and availability of healthy food in the Republic of Ireland. *Journal of Epidemiology and Community Health* 60: 1013-1019. C.f. Fair Society, *Healthy Lives* p133

⁴² Van Oers JAM, Bongers IMB, Van de Goor LAM and Garretsen HFL (1999) Alcohol Consumption, Alcohol-Related Problems, Problem Drinking, and Socioeconomic Status. *Alcohol & Alcoholism* 34(1): 78-88. C.f. Fair Society, *Healthy Lives* p57

⁴³ Rickards L, Fox K and Roberts C (2004) *Living in Britain: Results from the 2002 General Household Survey*. London: The Stationery Office; Bambra C, Joyce K and Maryon-Davis A (2009) Task Group on priority public health conditions, final report. Submission to the Marmot Review http://www.ucl.ac.uk/gheg/marmotreview/consultation/Priority_public_health_conditions_summary C.f. Fair Society, *Healthy Lives* p57

⁴⁴ Fair Society, *Healthy Lives*, p57

⁴⁵ Bambra C, Joyce K and Maryon-Davis A (2009) Task Group on priority public health conditions, final report. Submission to the Marmot Review http://www.ucl.ac.uk/gheg/marmotreview/consultation/Priority_public_health_conditions_summary C.f. Fair Society, *Healthy Lives*, p59

⁴⁶ Department of Health (2012), Consultation on front of pack nutrition labeling http://consultations.dh.gov.uk/food-information-and-promotions/fopnutritionlabelling/consult_view

⁴⁷ Department of Health (2012), Consultation on standardised packaging of tobacco products http://consultations.dh.gov.uk/tobacco/standardised-packaging-of-tobacco-products/consult_view

⁴⁸ Sellstrom E and Bremberg S (2006) Is there a "school effect" on pupil outcomes? A review of multilevel studies. *Journal of Epidemiology and Community Health* 60(2): 149-155; West P, Sweeting H and Leyland A (2004) School effects on pupils' health behaviours: Evidence in support of the health promoting school. *Research Papers in Education* 19(3), 261-291; Warwick I, Mooney A and Oliver C (2009) *National Healthy Schools Programme: Developing the evidence base*. London: Thomas Coram Research Unit, Institute of Education, University of London.

⁴⁹ Ridgers ND, Stratton G, Fairclough SJ and Twisk J W (2007) Children's physical activity levels during school recess: A quasi-experimental intervention study. *International Journal of Behavioral Nutrition and Physical Activity* 4: 19; see also 'Playtime initiatives could reduce childhood obesity' (2009) University of Essex. http://www.essex.ac.uk/events/event.aspx?e_id=982 C.f. Fair Society, *Healthy Lives* p 131

⁵⁰ Department for Education (2011) *Standards for School Premises: Consultation Document* <https://www.education.gov.uk/publications/standard/publicationDetail/Page1/DFE-00090-2011>

⁵¹ Ofsted: *The framework for school inspection from September 2012* <http://www.ofsted.gov.uk/resources/framework-for-school-inspection-september-2012-0>

⁵² Department of Health (2005), *National Healthy School Status: A Guide for Schools*

⁵³ See for example Hampshire or Leicestershire

⁵⁴ Fair Society, *Healthy Lives*, pp134-135

⁵⁵ *The Marmot Review: Implications for Spatial Planning*. 2011: London, pp9-15 <http://www.apho.org.uk/resource/item.aspx?RID=106106>

⁵⁶ Fair Society, *Healthy Lives* p 131

⁵⁷ National Institute for Health and Clinical Excellence. *Spatial Planning for Health* <http://guidance.nice.org.uk/PHG/Wave20/55#keydocs>

⁵⁸ *Creating Strong, Safe and Prosperous Communities* (this is past statutory guidance which no longer has effect) <http://www.communities.gov.uk/documents/localgovernment/pdf/885397.pdf>