

# Built environment & physical activity

## A briefing statement

### ► Summary

This briefing describes the association between the built environment and physical activity. It is not intended to be an exhaustive resource but a signpost to key issues. The statement outlines evidence-based interventions and recommendations, as well as suggesting key publications and organisations as a 'next step' to understanding and tackling this complex problem.

### ► Introduction

The built environment includes land-use patterns, transport systems, urban design, green spaces and all buildings and spaces that are created by people (including schools, homes, workplaces and recreational areas). Most sustainable physical activity occurs during everyday activities within the built environment rather than for leisure. Hence the qualities of the built environment have a significant role in facilitating more active lifestyles by reducing barriers to, and creating opportunities for, physical activity.

There is increasing evidence that adapting the built environment has the potential to encourage increased physical activity to levels that are beneficial to health.

### ► Evidence

There is an urgent need to increase physical activity levels in the UK, with over two-thirds of adults and children undertaking less than minimum recommended levels of activity. (Health Survey for England 2008). Physical activity contributes to preventing the main chronic conditions and diseases including cardiovascular disease, diabetes mellitus, some cancers and obesity. It also contributes to mental wellbeing and to the maintenance of mobility and independence in the elderly.

Physical activity levels decline with age and are lower among women than men; they are lower for black and minority ethnic groups, with the exception of African-Caribbean and Irish populations and are lower in low-income household groups than in high-income household groups.

The estimated societal cost of inactivity in England, at 2002 prices, was £8.2bn per year, including costs to the NHS and to society from sickness absence and from premature death. An estimated further £2.5bn per year is attributable to costs from obesity related to inactivity.

The built environment is an important determinant of physical activity behaviour. It can provide the opportunities, support and choices or barriers to being physically active. Over the past 60 years the proliferation of private car ownership has led to lower-density land use and a decline in incidental daily physical activity. A wide range of labour-saving devices and a shift in employment from more physically active to less active roles has also contributed to the decline in physical activity.

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#### FACULTY OF PUBLIC HEALTH

The UK Faculty of Public Health (FPH) is the leading professional body for public health specialists in the UK. It aims to advance the health and wellbeing of the population through three key areas of work: health improvement, health protection and health services. In addition to maintaining professional and educational standards for specialists in public health, and providing practical information and guidance for public health professionals, FPH advocates on key public health issues, influencing policy change at the highest level, and working closely with policymakers, professionals and the public to make a positive difference to people's health and wellbeing.

Building physical activity back into daily routines requires a range of activities which together make active travel, leisure and incidental activity in daily routines the easiest, cheapest and most appealing options for people.

Features of the built environment which have an impact on physical activity include<sup>1</sup>:

- location, density and mix of land use, street layout and connectivity
- physical access to public services, employment, local fresh food and other services
- safety and security
- open and green space
- affordable and energy-efficient housing
- air quality and noise
- resilience to extreme weather events and climate change
- community interaction
- transport.

There is supportive evidence that physical-activity levels are related to the built environment and urban structure, and that altering the environment can encourage greater activity. For example, the probability of obesity is lower in areas where there is land-use mix (ie. the area has a mix of residential, commercial, office and institutional uses), and also where streets are 'pedestrian-permeable'.

At the street level, walking has been increased in neighbourhoods through the provision of pavements, motor-traffic reduction strategies, better street connectivity and improved perceived neighbourhood safety. At the community level, proximity to and availability of walking trails, parks, functional green-space, playgrounds and recreation areas are associated with more walking.

Improving aesthetics and the safety of parks, leisure facilities and open spaces further enhances attendance and use. Furthermore, design of workplaces, stairwells and school playgrounds can affect physical activity levels. Research suggests that physical activity levels can be further enhanced through effective targeted promotional activities to encourage their use.

The built environment is closely related to health inequalities, with the poorest people living in those environments with the worst air

quality and least access to green space and experiencing the highest rates of road traffic injuries as pedestrians. Making changes to the built environment can reduce health inequalities, for example areas of green space can improve health regardless of class<sup>2</sup>.

Creating and maintaining the built environment to be conducive to physical activity has a number of societal, economic and environmental benefits including climate-change adaptation and mitigation, biodiversity, reduced traffic congestion, revitalisation of local shops and services and increased community cohesion and social interaction.

## ► **Public health approach to the built environment and physical activity**

The built environment can be modified through policy changes and in partnership with key organisations. In terms of new developments and regeneration, public health professionals can work with urban planners to modify the design of the built environment to be conducive to greater physical activity.

Public health professionals can work with transport planners to increase active travel (predominantly walking and cycling) and public transport use through a range of measures outlined in the Faculty of Public Health (FPH) Position Statement on Transport.

Working with environment and leisure services to improve the street environment and availability of pleasant safe local green spaces can provide lower cost and quicker effects in improving the attractiveness of the environment for incidental activity and leisure.

Working with employers to facilitate incidental activity in the workplace, such as active travel to off-site meetings, using the stairs and walking to the photocopier, can contribute to reducing prolonged periods of sedentary behaviour among workers.

Creating pleasant street environments in which people want to dwell and travel actively is important for raising levels of everyday physical activity; details of how to do this are set out in the *Manual for Streets*. To raise levels of physical activity the National Institute for Health and Care Excellence (NICE) recommends<sup>3</sup>:

Ensuring pedestrians, cyclists and users of other modes of transport that involve physical activity are given the highest priority when developing or maintaining streets and roads. This includes people whose mobility is impaired.

Methods for achieving this include:

- re-allocating road space to support physically active modes of transport (as an example, this could be achieved by widening pavements and introducing cycle lanes)
- restricting motor vehicle access (for example, by closing or narrowing roads to reduce capacity)
- introducing road-user charging schemes
- introducing traffic-calming schemes to restrict vehicle speeds (using signage and changes to highway design)
- creating safe routes to schools (for example, through the use of traffic-calming measures near schools and walking and cycle routes to schools)

The FPH Position Statement on Transport provides further details.

Children and young people need much higher levels of daily activity than adults for their healthy growth and development. Children and young people need opportunities to play actively in safe and attractive environments and to travel actively; older children need to be able to travel and play actively independently. NICE recommendations:

- Consult children and young people and their families to understand the factors that help or prevent them from being physically active. Pay particular attention to those who are likely to be less physically active. Ensure children and young people from different socioeconomic and minority ethnic groups are actively involved in the provision of activities. Also ensure those with a disability (or who are living with a family member who has a disability) are actively involved.
- Involve children and young people in the design, planning and delivery of physical-activity opportunities, using the information gathered.
- Actively promote public parks and facilities as well as more non-traditional spaces (for example, car parks outside working hours) as places where children and young people can be physically active.
- Make provision for children, young people and their families to be physically active in an urban setting. They should ensure open spaces and outdoor facilities encourage physical activity (including activities which are appealing to children and young people, for example, in-line skating). They should also ensure physical activity facilities are located close to walking and cycling routes.
- Ensure physical activity facilities are suitable for children and young people with different needs and their families, particularly those from lower socioeconomic groups, those from minority ethnic groups with specific cultural requirements and those who have a disability.

Further recommendations for buildings, schools, public open spaces and urban planning can be found in NICE (2008) NICE Public Health Guidance 8: *Promoting and creating built or natural environments that encourage and support physical activity* <http://www.nice.org.uk/PH8>

## RESOURCES

### ***Shaping Neighbourhoods – for local health and global sustainability (Second Edition)***

Barton H, Grant M, Guise R. Routledge. London. 2010.

### ***Manual For Streets***

Department for Transport. Thomas Telford. London. 2007 <http://assets.dft.gov.uk/publications/manual-for-streets/pdfmanualforstreets.pdf>

### ***A healthy city is an active city: a physical activity planning guide***

Edwards P, Tsouros A. World Health Organization. Copenhagen. 2008 [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0012/99975/E91883.pdf](http://www.euro.who.int/__data/assets/pdf_file/0012/99975/E91883.pdf)

### ***Cities for people***

Gehl, J. Island Press. Washington DC. 2010

### ***The Built Environment and Health Inequalities – Final Report***

Marmot Review Task Group. Task Group 4. 2009 <http://www.instituteofhealthequity.org/projects/built-environment-marmot-review-task-group-report>

### ***Watch Out for Health***

Healthy Urban Development Unit, NHS London. [http://www.healthyrbandevelopment.nhs.uk/documents/integrating\\_health/HUDU\\_Watch\\_Out\\_For\\_Health.pdf](http://www.healthyrbandevelopment.nhs.uk/documents/integrating_health/HUDU_Watch_Out_For_Health.pdf)

### ***Health and urban planning toolkit***

Healthy Urban Development Unit, NHS London [http://www.healthyrbandevelopment.nhs.uk/documents/engagement\\_toolkit/HUDU\\_Health\\_and\\_Urban\\_Planning\\_Toolkit\\_Main\\_Report.pdf](http://www.healthyrbandevelopment.nhs.uk/documents/engagement_toolkit/HUDU_Health_and_Urban_Planning_Toolkit_Main_Report.pdf)

### ***Promoting and creating built or natural environments that encourage and support physical activity***

Public Health Guidance 8. National Institute for Health and Care Excellence. 2008 <http://www.nice.org.uk/PH8>

### ***Steps to healthy planning: proposals for action***

Spatial planning & health group. 2011 [http://www.spahg.org.uk/?page\\_id=194](http://www.spahg.org.uk/?page_id=194)

### ***Active design: promoting opportunities for sport and physical activity through good design***

Sport England. 2007 <http://www.sportengland.org/facilities-planning/planning-for-sport/planning-tools-and-guidance/active-design/>

### ***Spatial Planning for Health: A guide to embedding the Joint Strategic Needs Assessment in spatial planning***

Town & Country Planning Association. 2012. [http://www.tcpa.org.uk/data/files/spatial\\_planning\\_for\\_health.pdf](http://www.tcpa.org.uk/data/files/spatial_planning_for_health.pdf)

## Policy context

In England, the Department for Communities and Local Government produced the *National Planning Policy Framework* (NPPF) <http://www.communities.gov.uk/publications/planningandbuilding/nppf> in March 2012. Section 8 (starting on page 17) outlines policies and actions to promote health through planning.

Each local authority must produce a Local Development Framework which is in line with the NPPF. Some may also need to be aligned with a regional plan such as the London Plan.

*Manual for Streets* provides design guidance for residential and urban streets in England and Wales  
<http://assets.dft.gov.uk/publications/manual-for-streets/pdfmanforstreets.pdf>

In Wales each local authority must develop a Local Development Plan; Wales also has a national Spatial Plan.

In Northern Ireland each council area has an Area Plan; Northern Ireland also has a Regional Development Plan.

In Scotland each council area is covered by a Local Development Plan and may also develop Supplementary Planning Guidance. Cities and surrounding authorities are also covered by a regional Strategic Development Plan. Scottish government guidance is laid out in the National Planning Framework, Scottish Planning Policy, Designing Places, Designing Streets. Supplementary Planning Guidance may be produced at regional or local level to tackle specific planning issues eg. land-use mix.

For more information and resources see Spatial planning & health group (2011) *Steps to healthy planning: proposals for action* Appendix 2 Planning and health arrangements in devolved administrations [http://www.spahg.org.uk/?page\\_id=303](http://www.spahg.org.uk/?page_id=303)

## Recommendations

- Build relationships with stakeholders including councillors, planning, regeneration and transport teams in the local authority, local employers and clinical commissioning groups.
- Ensure that public health is considered in local plans and strategies including the Local Development Framework, Supplementary Planning Guidance and Sustainable Communities Strategy.
- Ensure that built environment and planning are considered in the Joint Strategic Needs Assessment and Health and Wellbeing strategy.
- Make sure there is public health input at the earliest stages of planning proposals and that the potential health impacts of proposals are assessed.
- Follow the recommendations in the FPH Position Statement on Transport to deliver measures that achieve a modal shift away from cars in favour of walking, cycling and public transport.

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### REFERENCES

1. Spatial planning & health group. 2011. *Steps to healthy planning: proposals for action* [http://www.spahg.org.uk/?page\\_id=194](http://www.spahg.org.uk/?page_id=194)
2. Marmot Review Task Group. 2009. *Task Group 4: The Built Environment and Health Inequalities Final Report*. <http://www.instituteofhealthequity.org/projects/built-environment-marmot-review-task-group-report>
3. National Institute for Health and Care Excellence. 2008. *Public Health Guidance 8: Promoting and creating built or natural environments that encourage and support physical activity* <http://www.nice.org.uk/PH8>