



Public Health
England



UCL Institute of Health Equity

Local action on health inequalities:
**Improving access to
green spaces**



Health equity briefing 8: September 2014

About PHE

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through advocacy, partnerships, world-class science, knowledge and intelligence, and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

About the UCL Institute of Health Equity

The Institute is led by Professor Sir Michael Marmot and seeks to increase health equity through action on the social determinants of health, specifically in four areas: influencing global, national and local policies; advising on and learning from practice; building the evidence base; and capacity building. The Institute builds on previous work to tackle inequalities in health led by Professor Sir Michael Marmot and his team, including the 'Commission on Social Determinants of Health', 'Fair Society Healthy Lives' (The Marmot Review) and the 'Review of Social Determinants of Health and the Health Divide for the WHO European Region'. www.instituteofhealthequity.org

About this briefing

This briefing was commissioned by PHE and written by the Institute of Health Equity (IHE). It is a summary of a more detailed evidence review on the same topic and is intended primarily for directors of public health, public health teams and local authorities. This briefing and accompanying evidence reviews are part of a series commissioned by PHE to describe and demonstrate effective, practical local action on a range of social determinants of health.

Reuben Balfour and Jessica Allen wrote this briefing for IHE.

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Improving access to green spaces

Summary

1. There is significant and growing evidence on the health benefits of access to good quality green spaces. The benefits include better self-rated health; lower body mass index, overweight and obesity levels; improved mental health and wellbeing; increased longevity.
2. There is unequal access to green space across England. People living in the most deprived areas are less likely to live near green spaces and will therefore have fewer opportunities to experience the health benefits of green space compared with people living in less deprived areas.
3. Increasing the use of good quality green space for all social groups is likely to improve health outcomes and reduce health inequalities. It can also bring other benefits such as greater community cohesion and reduced social isolation.
4. Local authorities play a vital role in protecting, maintaining and improving local green spaces and can create new areas of green space to improve access for all communities. Such efforts require joint work across different parts of the local authority and beyond, particularly public health, planning, transport, and parks and leisure.

Introduction

Urbanisation, population growth and demand for competing land uses are putting many of our green spaces under threat. Protecting local green spaces and making them accessible for public use is important for the economy and the health and wellbeing of society.

There is growing evidence of the physical and mental health benefits of green spaces. This evidence shows the role green spaces can play in measures to improve health outcomes and reduce health inequalities in a cost-effective way that promotes healthy and active lifestyles. Increasing the number of green spaces in areas where green space is scarce may therefore have social and economic benefits.

What is green space?

A broad range of open spaces may be of public value and included in green space assessments of need and provision (box A). Proximity to plentiful, good quality green space has an important influence on the health of local populations.¹ Accessible and good-quality green space is linked to better and more frequent use of green spaces (box B).²

BOX A

Types of green spaces

The Department for Communities and Local Government³ has defined a range of green spaces:

- parks and gardens – including urban parks, country parks and formal gardens
- natural and semi-natural urban green spaces – including woodlands, urban forestry, grasslands, common land, wetlands, area of open and running water, wastelands, derelict open land and rock areas
- green corridors – including canal and river banks, cycle ways and rights of way

- outdoors sports facilities (with natural or artificial surfaces and either publicly or privately owned) – including tennis courts, bowling greens, sport pitches, athletics tracks, playing fields and other outdoor sports areas
- amenity green space – including informal recreation spaces, green space in around housing, domestic gardens and town or village greens
- provision for children and teenagers – including play areas, adventure playgrounds, skate parks, basketball courts and other informal areas
- allotments, community gardens, city (urban) farms and land used for permaculture
- cemeteries and churchyards
- accessible countryside in urban fringe areas
- civic spaces, including civic and market squares
- landscape around buildings – including street trees

BOX B

Accessible green space

In 2008 Bristol City Council developed an accessible green space standard, known as the distance standard, which sits alongside quality and quantity standards.⁴ The distance standard aims to safeguard and encourage an accessible network of green spaces. It is based on local research that identified the distance Bristol residents felt they could reasonably walk to access green space, which coincided with the layout of Bristol's green spaces to ensure the standards were credible.

The distances proposed include:

- distance to the nearest green space – 400m/nine minutes walk
- children's play space – 450m/ten minutes walk
- formal green space – 600m/15 minutes walk
- informal green space – 550m/13 minutes walk
- natural green space – 700m/18 minutes walk

The links between green spaces and health inequalities

There is growing evidence of the physical and mental health benefits of green spaces. Research shows that access to green space is associated with better health outcomes, and income-related health inequality is less pronounced where people have access to green space.¹ However, this access is unequally distributed across England. People living in the most deprived areas are ten times less likely to live in the greenest areas compared to people living in the least deprived areas.¹

Access to good quality green space is associated with positive health outcomes, including:

- improvements in mental health and wellbeing, such as depression, stress, dementia^{5,6}
- increased longevity in older people⁷
- lower body mass index (BMI) scores, overweight and obesity levels and higher levels of physical activity^{2,8}
- better self-rated health

Green space can improve the environmental quality of an area with consequential health benefits. Some of the environmental benefits of green spaces include improved air and water quality, noise absorption and reduced 'urban heat island' effects. Additionally, green spaces can improve absorption of excessive rainwater and reduced surface water run-off reducing the likelihood of floods and sewage overflow, while protecting biodiversity and enhancing ecosystems.⁹

The links between access to green space and levels of physical activity are well-established in research, which shows higher levels of physical activity in areas with more green space.¹⁰ Estimates suggest that an inactive person is likely to spend 37% more time in hospital and visit the doctor 5.5% more often than an active person.¹¹ In 2007, physical inactivity was estimated to cost the NHS between £1 billion and £1.8 billion.¹²

What works to improve access to green space?

Access to green space is not just restricted by physical barriers of location, proximity, quantity and quality. Consideration of local concerns can help with choosing appropriate ways of improving access to green space, particularly among groups of people least likely to access green space. Commonly cited barriers to using green space include fear for personal safety; antisocial behaviour; poor maintenance of green spaces; being too busy at work; poor weather; being too busy at home; poor health; old age; and lack of transport.^{13,14} Local authorities can play an important role in helping people overcome these barriers.

BOX C

How to improve access to green spaces

1. Create new areas of green space and improve the quality of existing green spaces.
2. Increase accessibility of green spaces and improve engagement with local people.
3. Increasing the use of good quality green space for all social groups.

Creating new areas of green space and improving the quality of existing green spaces.

As described above, living near green space is important in terms of accessibility, usage and health outcomes. Developing new areas of green space in neighbourhoods where there is little green space, or improving the quality and long term maintenance of green spaces in local areas where the quality may be poor, is likely to improve access to green space.

Increasing accessibility and engagement.

Innovative strategies to encourage people to try green spaces and motivate them to venture outdoors can help to improve access to green space. Local residents may also need help to overcome barriers which they have identified that prevent them from accessing green space.

Increasing the use of good quality green space for all social groups.

This is likely to result in improved health outcomes and reduced health inequalities. It will also bring benefits in other desirable outcomes, such as greater community cohesion and reducing social isolation.

The case studies outlined in boxes D, E and F provide examples of local measure which have been implemented to improve access to green spaces.

BOX D

Clissold Park restoration^{15,16}

Clissold Park is located in the north-east London Borough of Hackney. In 2011, £8.9 million was invested into park restoration, to build and improve a wide range of facilities and features. Funding for the project was secured after local councillors submitted a bid to the Heritage Lottery Fund's Urban Parks Programme.

Aside from grass areas and trees, the park offers a wide range of amenities, including:

- aviary and animal enclosures (including butterfly dome)
- children's play area
- a café and function room
- dog free areas
- fountains
- multi-use games area
- organic food growing area
- pond dipping platform
- paddling pool
- table tennis table
- refreshment kiosk
- river
- tennis courts
- toilets
- wheels park

Survey data published in 2014 recorded over three million visits between May 2013 and April 2014. This far exceeds the year's Heritage Fund Target of two million visits. Clissold Park users group hopes to publish analysis in the near future demonstrating how visitors have been using the park.

BOX E

Glasgow health walks^{17,18}

Glasgow has some of the highest levels of health inequality in Europe and lowest life expectancy in the UK. As a result, the Walk Glasgow project was implemented to try and address these issues and improve physical activity levels and quality of life for the residents of Glasgow. Working with local organisations, the project aims to establish and support local health walks within the communities of Glasgow.

The project offers free, gentle and friendly walks of up to two miles long and is available to everyone. The walks are facilitated by trained co-ordinators who develop connections with organisation working directly with communities and help them to build support and community capacity to carry out the walks.

Paths for All commissioned an evaluation of the project which produced some positive results.

Between April 2011 and March 2012, Walk Glasgow delivered 33 walk projects open to the general public, and 26 projects restricted to clients from groups such as hospital in-patients.

Participants reported a number of improvements, including:

- feelings of improved fitness and physical health
- improved confidence
- increase in social contacts
- reduction in social isolation

The project was evaluated for its social return on Investment. During the year 2011-12 £48,705.15 was invested in the Walk Glasgow project, which accounted for staff, volunteers, time, expenses and training. The evaluation recorded outputs on 21 projects, each delivering an average of 35 walks over the year. The value of the outcomes is estimated at £384,630. This represents a cost benefit ratio of £8 in benefits to society for every £1 invested.

BOX E

Dudley Healthy Towns project¹⁹

Dudley Healthy Towns project is investing £4.5 million into encouraging families to make the most of the borough's outdoor areas.

The project has invested in improving five parks and play areas, converting them into healthy hubs. Each hub comes with a free outdoor gym, healthy towns building and park ranger. It has also invested in creating active travel corridors, which make it easier and safer for people to walk and cycle across the borough.

Evaluation of the project found there were a number of measurable improvements, including:

- increased healthy hub usage
- increased visiting frequency and duration
- self-report physical activity increases within the healthy hub population
- improvements in the overall condition of the healthy hubs and user satisfaction
- increased perceptions of safety

Increasing recognition of green space as a vital and health-promoting part of local infrastructure may help to counteract increasing financial pressure on local authorities to sell off green space and with negotiations for new open spaces to be built as part of local planning applications.²⁰

Conclusion

There is good evidence in this area linking access to green spaces and health outcomes. Furthermore, a wide range of interventions established at both the local and national level have been successful in improving access to green spaces. It is essential that efforts to protect, increase and improve green spaces continue. The new landscape for planners, set out in the National Planning Practice Guidance published in 2014, provides an opportunity for public health and planning departments in local authorities to work together to improve the health of local communities. Improving access to green spaces is an important part of this work.

References

1. Mitchell R, Popham F. Effect of exposure to natural environment on health inequalities: an observational population study. *Lancet*. 2008;372(9650):1655-60.
2. Coombes E, Jones PJ, Hillsdon M. The relationship of physical activity and overweight to objectively measured green space accessibility and use. *Social Science & Medicine*. 2010;70(6):816-22.
3. Department for Communities and Local Government. Consultation paper on a new Planning Policy Statement: Planning for a Natural and Healthy Environment. London: 2010.
4. Bristol City Council. Bristol's Parks and Green Space Strategy 2008. Available from: http://www.bristol.gov.uk/sites/default/files/documents/leisure_and_culture/parks_and_open_spaces/Parks%20and%20Green%20Space%20Strategy%20-%20adopted%20Feb%202008_0_0_0_0_0_0.pdf.
5. White MP, Alcock I, Wheeler BW, Depledge MH. Would you be happier living in a greener urban area? A fixed-effects analysis of panel data. *Psychological science*. 2013;24(6):920-8.
6. Erickson KI, Gildengers AG, Butters MA. Physical activity and brain plasticity in late adulthood. *Dialogues in Clinical Neuroscience*. 2013;15(1):99-108.
7. Takano T, Nakamura K, Watanabe M. Urban residential environments and senior citizens' longevity in megacity areas: the importance of walkable green spaces. *Journal of Epidemiology and Community Health*. 2002;56(12):913-8.
8. Bell JF, Wilson JS, Liu GU. Neighbourhood greenness and 2-year changes in body mass index of children and youth. *Am J Pre Med*. 2008;35(6):547-53.
9. Science for Environment Policy. The Multifunctionality of Green Infrastructure: In-depth report 2012. Available from: http://ec.europa.eu/environment/nature/ecosystems/docs/Green_Infrastructure.pdf.
10. Ellaway A, MacIntyre S, Bonnefoy X. Graffiti, greenery, and obesity in adults: secondary analysis of European cross sectional survey. *British Medical Journal*. 2005;331(7514):611-2.
11. Sari N. Physical inactivity and its impact on healthcare utilization. *Health Econ*. 2009;18:885-901.
12. Department of Health. Be Active Be Healthy: A Plan for Getting the Nation Moving. London: 2009.
13. England N. Monitor of Engagement with the Natural Environment: The national survey on people and the natural environment - Annual Report from the 2012-13 survey. London: 2013.
14. Hynds H. Green Exercise Programme Evaluation. London: 2011.
15. Hackney Council. Clissold Park and Clissold House 2014. Available from: <http://www.hackney.gov.uk/clissold-park.htm#Ux8ftIVht8E>.
16. Clissold Park User Group. Park Stories 2014. Available from: <http://www.clissoldpark.com/park-history/park-stories/>.
17. Carrick K. Glasgow Health Walks Social Return on Investment Analysis 1st April 2011 to 31st March 2012. Glasgow: 2013.
18. Paths for All. Making an impact: Glasgow Health Walks Social Return on Investment Analysis - Summary Report. Glasgow: 2013.
19. Peters DM, Jones CV. Dudley Healthy Towns Programme Evaluation: Executive Summary 2011. Available from: <http://ecosystemsknowledge.net/sites/default/files/wp-content/uploads/2012/12/Dudley-Healthy-Towns-Executive-Summary1.pdf>.
20. Ross A, Chang M. Planning Healthier Places - Report from the Reuniting Health with Planning Project. London: Town and Country Planning Association, Public Health England,; 2013.

Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG
www.gov.uk/phe
Twitter: @PHE_uk

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