

Creating *the* Right Environments *for* Health

The Annual Report from the Director of Public Health



Bracknell Forest
July 2018



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ABOUT THIS REPORT

This report was developed and produced on behalf of the Acting Director of Public Health by Shared Public Health Services for Berkshire, and authored and coordinated by Dr Steffan Glaze (Foundation Doctor).

This report is the joint effort of all Consultant-led Public Health teams in Berkshire to produce the statutory annual report of the Director of Public Health both as a pan-Berkshire document, celebrating the history of shared working across the six Unitary Authorities; and also as a unique report for each individual authority.

Case studies were provided by a variety of individuals from local authority public health teams or other groups, such as voluntary organisations who are acknowledged below and with their contributions.

Finally, we acknowledge Judith Wright who was Interim Strategic Director of Public Health for Berkshire from April-December 2017, who conceived of the topic and encouraged us all to find the right environments for health.

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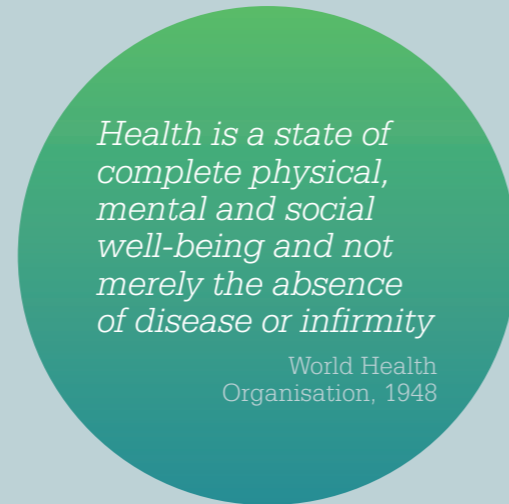


INTRODUCTION – The Wider Determinants of Health

There are many factors, or determinants, that come together to affect our health. There are some we cannot change – chiefly, our genes. Of the modifiable factors, some are individual and personal choices such as taking up smoking or choosing to exercise. On a population level, there are the wider determinants of health: a diverse range of economic, environmental and social factors that affect people's health and influence their choices and lifestyles. Difficult to quantify, many of these determinants are shaped by national and local government policies, our environment and the distribution of wealth - things not quickly changed. They include:

- Income and social status
- Educational attainment
- Quality of housing
- Community and social networks
- Activity – the way we live

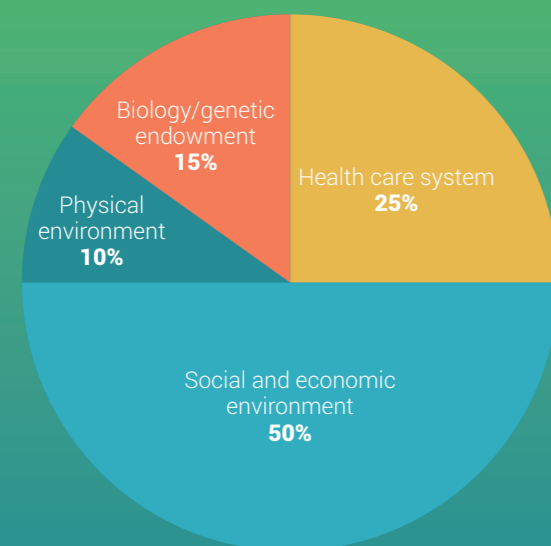
It is generally agreed that these wider determinants of health overall have a more significant impact on the health of individuals than direct interventions in health



care. Estimates vary, but it seems that health care contributes less than 25% of our overall health, with these wider determinants contributing to the majority.

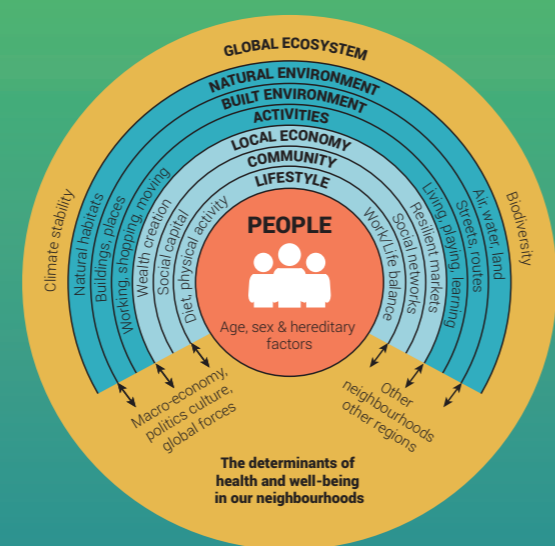
Public health, as a responsibility of local authority, has the opportunity to influence these determinants for the improvement of the health and wellbeing of the population it serves. The benefits may not be quickly realised, but are potentially vast and wide reaching, and could reduce the inequalities in our society and improve health and wellbeing for all of us.

[1] Estimated impact of determinants on health status of the population



Source: Canadian Institute for Advanced Research, Health Canada, Population and Public Health Branch AB/NWT 2002

[2] Barton and Grant, "A health map for the local human habitat", 2006



The health map: Barton and Grant 2006 developed from a concept by Dahlgren and Whitehead 1991

This report will focus on one of the wider determinants of health – the natural environment – and how this could be used to improve our health. We will begin by describing the natural environment and its relationship to other determinants of health, then go on to examine particular health dimensions in this context. Finally, we will consider the challenges – and opportunities – to the natural environment that we can adjust to improve the wellbeing of our communities and from these build recommendations to act on.

Throughout the report, you will find case reports and research. We want to make effective changes, such that investments made will reap benefits for our communities. The research is included to discuss the scientific factual evidence available, and local case studies highlight the ways in which local communities are already using the natural environment to stay healthy or improve their health.

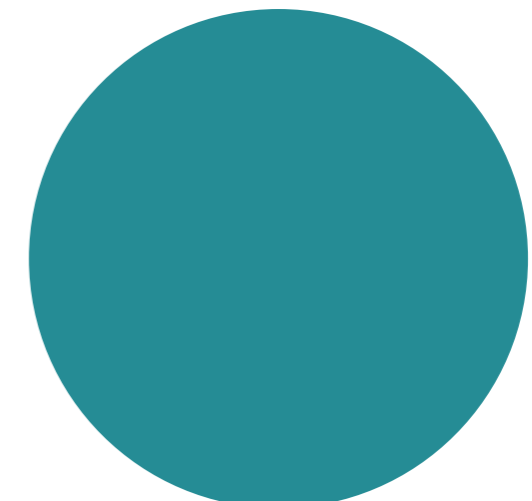
RESEARCH

Most of the research described in this report comes from scientific journals. Researchers conduct their studies, and then publish their results only after a body of other scientists have reviewed their work for accuracy. It can be difficult to get evidence on a population scale because there are so many things that can contribute to health and wellbeing, making it hard to measure the amount caused by a single aspect. The studies selected are considered to be of good quality, but reflect only a small proportion of the data available.



CASE STUDY

All of the case studies are examples of the work going on in this local authority in line with the theme of the report. We are pleased to highlight a variety of council, voluntary and national initiatives that are contributing to improving our health.



THE NATURAL ENVIRONMENT

The natural environment can encompass many parts of our surroundings. We often think of wide open fields, quiet forests or flowing rivers as the truly natural environment, but our urban environments can include natural elements. Often termed 'green space', this includes many things, from sports fields to decorative gardens. The natural environment can also encompass 'blue spaces' such as rivers and lakes, which are features of our area that can enable exercise, time in nature, leisure and relaxation. There is evidence that this natural environment has an influence on health in a variety of ways.

The ways in which the natural environment can improve health are complex and intertwined with many other factors. There are broad themes that have appeared from the research in this field, namely [3]:

- Stress reduction
 - It has been known for a long time that spending time in nature can have restorative effects, through relaxation.
- Improved environmental quality
 - Green spaces are more likely to be biologically diverse, and contribute to improving air quality and reducing the effect of heat concentration in cities.
- Greater social cohesion
 - Areas of natural environment are places that people can socialise and congregate, places of pride in the community and as a result improve the cohesion of neighbourhoods.
- Increased physical activity
 - Green spaces are appealing to visit, and typically need to be walked, cycled or played in to appreciate them.

We will see throughout this report how scientific research has found evidence from an individual to a population level that green spaces and the natural environment can have positive effects on our health and wellbeing. Although the exact mechanism isn't clear, there is still the opportunity to increase the availability, quality and use of natural elements in our communities.

Policy

The Department for Communities and Local Government published a consultation paper [4] in 2010 on planning policy and shaping healthy environments. Within the paper, the government defined a wide 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, areas 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, 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 and 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

RESEARCH

At an individual patient level, in 1983 R Ulrich [5] found that a view over green space could quicken someone's recovery from surgery in a suburban hospital in Pennsylvania, USA. This study compared similar people who had the same operation, but what differed between the two groups compared was the view from their window - either a brick wall or trees. Those with the green view had statistically significant lower length of stays and lower use of painkillers. This early evidence showed that there may be a restorative effect to simply viewing greenery and natural environments.



Looking at the population level, a study in the Netherlands [6] examined the electronic GP records of over 340,000 patients, and measured their illness by how often they saw their GP for various health problems. This was then compared with the percent of green space in a radius around their postcode based on satellite imaging. The analysis showed that over half the health problems were less common among

the patients who lived in areas with more green space, even when correcting for potential confounding factors such as age and socioeconomic status. The correlation was strongest for anxiety and depression, children under 12 and those aged 46-65. They found that an extra 1% of green space in a person's area was as beneficial to overall health as being a year younger.



How can we measure Green space?

How can we define how 'green' our neighbourhoods are? There are many ways this is measured in scientific study, the two most common being:

- Satellite imaging – by looking at photographs taken from space, scientists can calculate what percent of an area is covered by plants. This is relatively easy to derive, and data is available for much of Europe. However, it does not account for the quality of the green space, e.g. for access or for food production, or how much we can actually access or use that greenery, as any plants on roofs, within private land, or in the middle of a roundabout would be included.
- Mapping – analysing maps can reveal the different land types in an area, from arable to housing. Counting how much of an area is covered by accessible green space can be used to measure the amount of natural environment in a neighbourhood. This method will miss small areas, such as verges and paths, which contribute to green routes but are not large enough to be documented on most maps.

Although effective at developing a measure of how green an area is, neither of these methods account for how easy the space is for people to access, how much that space is used or the quality of it. This aspect of the natural environment can be heavily influenced by the community who use it and live near it, such that we can all have a part to play in making the most of green spaces in our area.



Resources

A variety of resources are available for us to find and use green space in our area.

WOODLANDS TRUST WEBSITE

The Woodlands Trust, the UK's largest conservation charity, has an online database of the woods they manage. Using your postcode, you can find more about the woodland in your area.

OS GREENSPACE

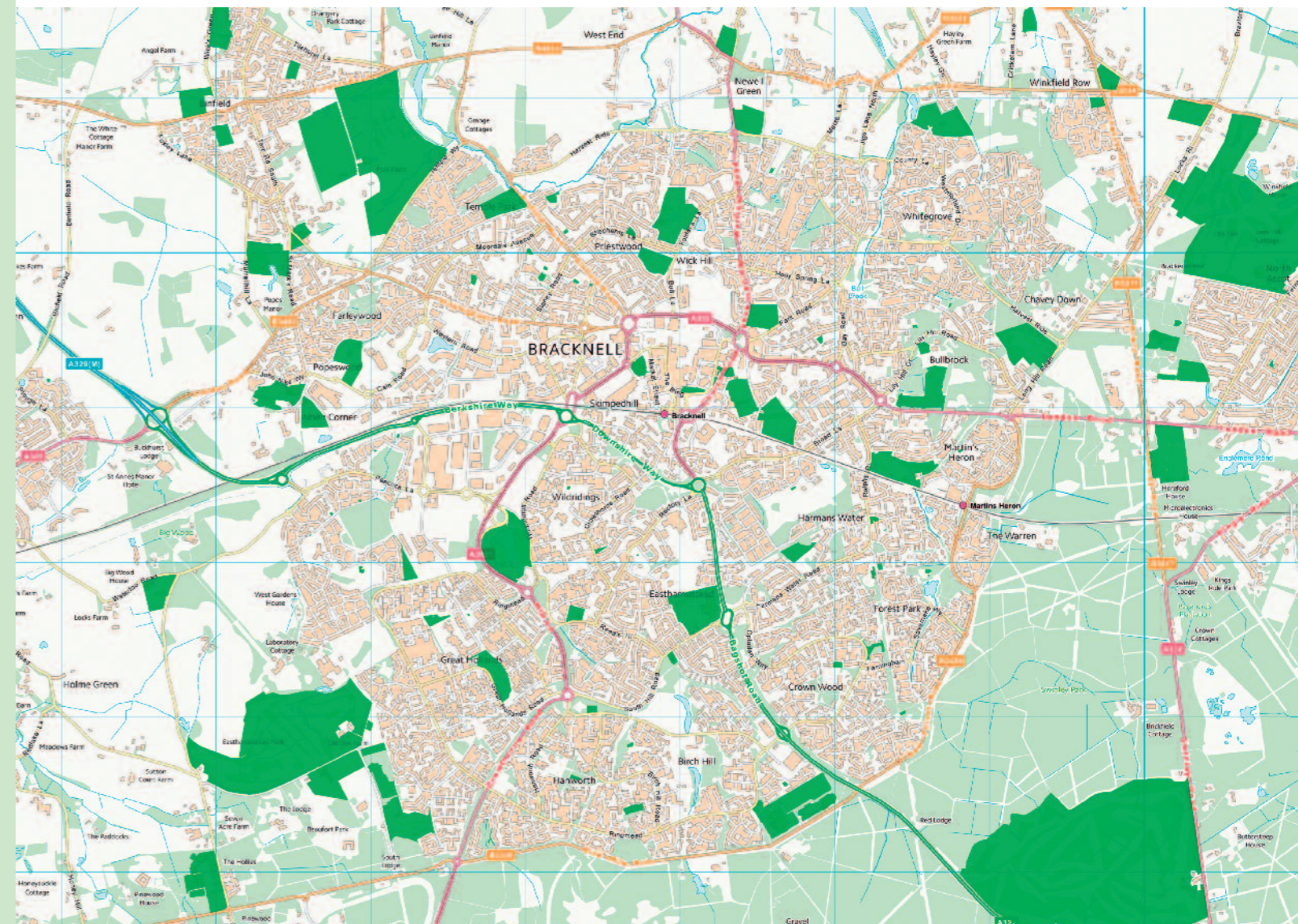
The Ordnance Survey has assessed their own data about land use in the United Kingdom to produce an interactive map which can be used to see where green spaces are, what they are used for and how they can be accessed.

Bracknell Forest Council keeps online records of all the green spaces they manage, which includes details about facilities and opening times. You can find this resource at the following address:

<https://www.bracknell-forest.gov.uk/parks-and-countryside>

The public health team have produced an interactive online community map to link our residents up with over 350 local groups, including those that promote physical activity and social connectedness. Follow this link to have a look around:

<http://health.bracknell-forest.gov.uk/online-services/community-map/>



Source: © Ordnance Survey OpenData (2018)

HEALTH OUTCOMES AND BEHAVIOURS –

Profiles

The following section describes some of the key health outcomes and behaviours on which there is a firm evidence base for the effect of green space or the natural environment. The relevance of these to our communities is demonstrated by data about the current health and wellbeing of the local communities in a summary graphic. You will also find original research evidence and a case study from your local area.



Mental Health

Mental health is essential for our overall health and wellbeing, and changes in policies and the NHS is increasingly recognising this. The 2011 report from the Department of Health 'No Health Without Mental Health' identifies some key facts about the national picture:

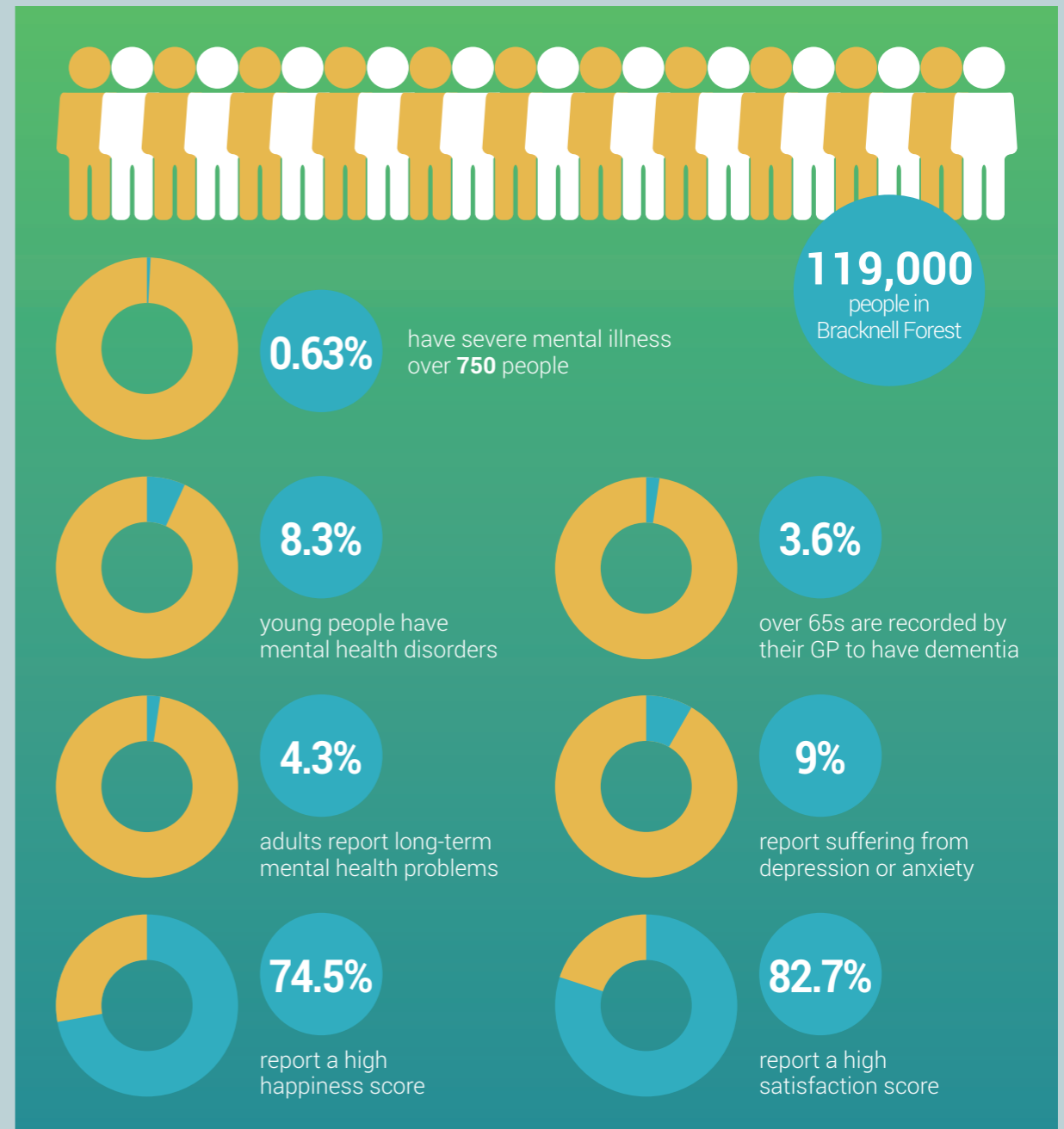
- mental illness is the single largest cause of disability in the UK
- at least one in four people will experience a mental health problem at some point in their life and one in six adults have a mental health problem at any one time
- the costs of mental health problems to the economy in England have recently been estimated at a massive £105 billion, and treatment costs are expected to double in the next 20 years

National policies and initiatives recognise the benefits of spending time in green spaces on mental health. For example, Mind's Ecominds scheme found 7 of 10 people experienced significant increases in mental wellbeing by the end of an ecotherapy project [7]. It helped people find full-time employment, with potential savings of around £5,700 for each person in terms of government spend.

How could natural environments contribute to changing this picture? It is hard to identify exactly the mechanisms for these benefits, but a variety of evidence is available. It has been shown that exposure to natural environments can reduce stress, anxiety, blood pressure and anger. Over longer periods of time, those who live in greener areas are more likely to report good mental health and wellbeing.

IN OUR AREA

There are currently estimated to be around 119,000 people [8] in Bracknell Forest: 0.63% have severe mental illness – over 750 people. An estimated 8.3% of young people have mental health disorders, and 3.6% of over 65s are recorded by their GP to have dementia. Responding to a GP Survey, 4.3% of adults report long-term mental health problems, and 9% report suffering from depression or anxiety. In terms of self-reported well-being, 74.5% report a high happiness score and 82.7% a high satisfaction score. [9] [10]



RESEARCH

Evidence for the effect of green space on mental health looks at both the short-term, temporary effects and long term benefits. Contact with nature can improve emotional state, reduce self-reported anger, fatigue, anxiety, sadness and increase feelings of energy. [11]

Hartig et al [12] tested whether natural environments were more relaxing and restorative than purely urban surroundings, by giving subjects difficult tasks. They measured blood pressure and reported mood throughout, and found that being in nature was associated with quicker returns to normal levels of blood pressure and mood after stress – evidence that being in nature can improve your physical and mental wellbeing in times of stress.

A study by Alcock et al [13] looked at people who moved to greener areas during the years of an annual survey of their mental health. Moving from a less to more green area was associated with improvements in reported mental health.



CASE STUDY: THE GREEN GYM By Annie Yau-Karim, Public Health Programme Officer

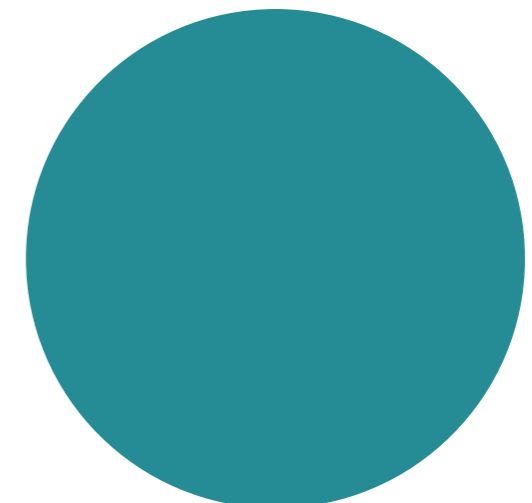
Bracknell Forest Green Gym at Jealott's Hill (also known as shared land) was a pilot project in 2016/17. The Green Gym concept combined horticultural activities with outdoor resistance-based exercise to improve the mental and physical wellbeing of those struggling with mild to moderate mental health problems, in particular depression and dementia.

The participants were given plenty of control and choice over their physical activity for the session, aimed at increasing adherence and results. The choices of activities were agreed by specialist trained staff from the site. Over 50 referrals were received. 1,920 sessions were planned for the year but overall 2,272 were actually achieved. A number of partnerships were established to work with the project, for example, the local job club and the project for young people with dementia.

The Green Gym project also ran a number of community learning sessions on "Natural exercise for community health" both on site and at the community-based Open Learning Centre. These sessions highlighted the positive effects of being out and about in the natural environment and the "grow your own" ethos.

The final evaluation demonstrated that for every £1 that Green Gym cost, £10.36 of social impact value was generated.

Today, the group has evolved into "Community First", run by a member of staff with volunteers, and it is continuing to work with some local GPs to signpost people with mild to moderate mental health problems.



Children and Young People

Every child deserves the best start in life to give them the opportunity to thrive in life. Pregnancy and upbringing impacts our physical and mental health during childhood and through to adulthood. Enabling good maternal health can allow a safe delivery and good growth of the foetus, preventing potential poor outcomes from low birth weight or prematurity. The development of a baby's brain and immune system begins in the womb, and continues as they grow.

Green spaces may alter the environmental stimuli we are exposed to, and through this change whether we develop inflammatory diseases such as asthma. They can encourage us to be more active or to connect with our community, which can improve cognitive development. Exposure to the natural environment appears to have an impact on the development of our microbiome – the vast number of microorganisms

that co-inhabit the human body. This microbiome may have an impact on the formation of our immune system, and as such the prevalence of allergies and long-term inflammatory diseases – including asthma. There is also evidence that street trees can improve the air quality in urban areas by absorbing some of the particulate matter from pollution, as well as reducing the 'heat island' effect generated by the concentration of hard surfaces and taller buildings [14].

Together with the improvements in mental health through spending time in nature, green spaces can contribute to a positive development for children, especially for play. The natural environment can improve our environment and change our behaviour to help us grow well. A healthy community which is using the green space available for both formal and informal play to increase a child's chance for the best start in life can set them off on the way to greater health and wellbeing.

RESEARCH

Dadvand et al [15] studied a group of 2,593 primary school children in 36 schools in Barcelona, Spain. Using repeat measures of memory and inattentiveness as an indicator of cognitive development, they compared this with exposure to green space. They measured the 'greenness' around the children's homes, their route to school and the school itself from satellite data that measures the percent of an area covered by plants. They found greater progress in the children in greener schools and home environments, partly explained by a reduced exposure to air pollution.

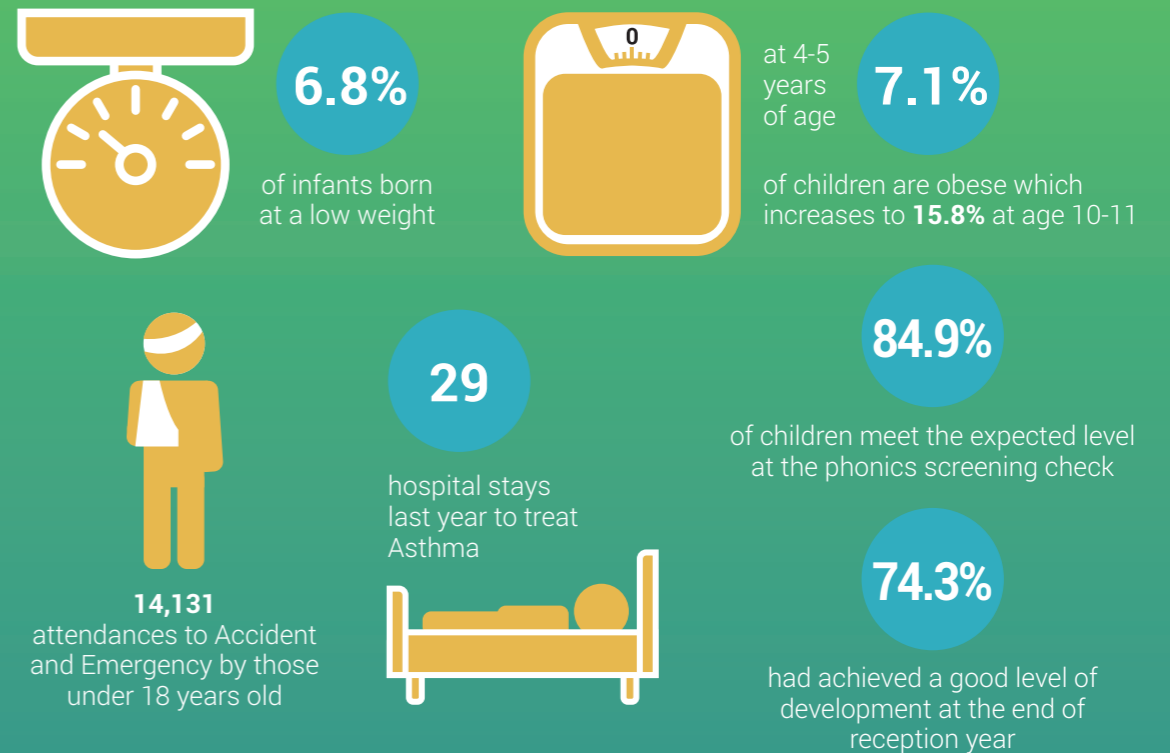
An American study [16] examined the association between birth outcomes and residential greenness. Looking at 64,705 births in Vancouver, Canada (1999-2002), they examined the density of vegetation within 100m of participants' homes, their birth outcomes and other aspects of their environment. They found that, independent of air pollution, noise, neighbourhood walkability and proximity to a park, increasing residential greenness was associated with beneficial birth outcomes including higher term birth weight and reduction of likelihood of prematurity.



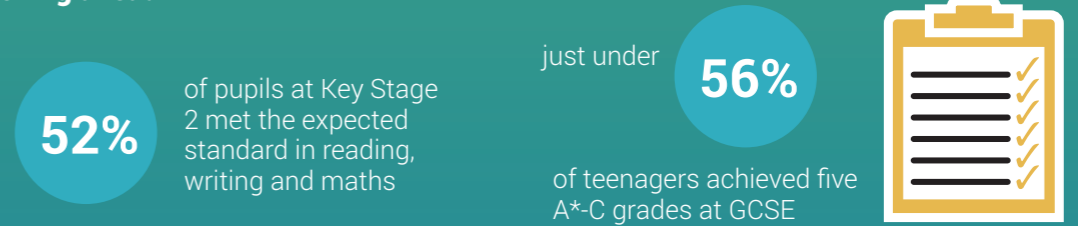
IN OUR AREA

Looking at the most recent data for the health of children in Bracknell Forest, we see 6.8% of infants born at a low weight. There were 14,131 attendances to Accident and Emergency by those under 18 years old, and 29 hospital stays last year to treat asthma. At 4-5 years of age 7.1% of children are obese, which increases to 15.8% at age 10-11.

In terms of being ready for school, 84.9% of children meet the expected level at the phonics screening check and 73.4% had achieved a good level of development at the end of reception year. Looking ahead, 52% of pupils at Key Stage 2 met the expected standard in reading, writing and maths; 55.9% of teenagers achieved five A*-C grades at GCSE. [17] [18] [19]



Looking ahead



CASE STUDY: READY STEADY MUMS

By Annie Yau-Karim, Public Health Programme Officer

Ready Steady Mums is a national network of community and volunteer led walking groups, first initiated by the Institute of Health Visiting. The group's ethos comprises working with health professionals, passionate volunteers, and everything the network offers at no charge. The groups aim to encourage wellbeing in pregnancy and beyond.

Locally there is a very active group in Sandhurst; over 156 people have joined their Facebook group since April 2017, which was set up, and is managed by, one of the volunteer mums. The group meets at the local café every Tuesday where they share some refreshments before and after the walk.

Participants say that *'it is a great way to meet new mums, get some exercise and hopefully give the little ones a bit of nap time!'* and *'Great way to lose the baby weight and let the babies get some fresh air'*

The owner of the Sandhurst Pistachios Café told us *'We encourage and promote the group to all new mothers and put up posters advertising Ready Steady Mums. Our staff are always happy to help out mums/dads/carers with buggies, etc.'*



CASE STUDY: JUNIOR PARKRUN

By Kathryn Mullen, Public Health Programme Officer

The first ever Bracknell junior Parkrun was held on Sunday 14th January 2018, at which 155 junior runners attended! The free 2km run is open to all children aged 4-14 years and runs every Sunday morning, 9am at Great Hollands Recreational Ground. It is a friendly and fun atmosphere, with the option to grab a post Parkrun coffee at the on-site coffee shop afterwards. Wrist bands and certificates are provided at each milestone; half marathon club (11 runs), marathon club (21 runs), ultra marathon club (50 runs) and 100 junior Parkruns. These wristbands and certificates are handed out at the weekly inaugural event. Bracknell junior Parkrun is still going strong with latest figures showing 85 junior runners and 26 volunteers attending!



Physical Activity

Being active can have wide reaching benefits to our health. It has been shown to reduce the risk of coronary heart disease, stroke, type 2 diabetes. It can help maintain a healthy weight, improve self-esteem and reduce depression and anxiety. Physical inactivity contributes to 1 in 6 deaths [20], estimates suggest that an inactive person is likely to spend 37% more time in the hospital and visit the doctor 5.5% more often than an active person [21]. The Department for Environment, Food and Rural Affairs estimates that the health system could save £2.1 billion per year if everyone had sufficient access to green space and its benefits. [22]

We also know our environment can shape our behaviour, so there is the opportunity to design our neighbourhoods and towns with activity in mind. 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 [23]. Careful planning of towns can enable active travel – i.e. walking or cycling as a mode of transport – through making distances achievable and creating safe and aesthetically pleasing routes to travel on. Those who walk or cycle to their place of work are more likely to meet their physical activity needs. If more of us were active, we could significantly improve the health and wellbeing of our communities. The potential benefits are not limited to health – reducing journeys made by car will decrease carbon emissions, air pollution and traffic, and encouraging walking for shopping can boost our local economy.

Accessible, quality green spaces also allow sports and play to increase leisure time activity. Supporting local sports clubs with facilities, giving spaces for community groups and the provision of playgrounds can all enable people at all ages to be more active. We can harness the natural environment to increase physical activity in our community, and be healthier as a result.

What are the health benefits of physical activity?



[24] Public Health England Health Matters Blog, 2016

POLICY

Chief Medical Officer Recommendations [25]:

1. Adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes (2½ hours) of moderate intensity activity in bouts of ten minutes or more – one way to approach this is to do 30 minutes on at least five days a week.
2. Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or a combination of moderate and vigorous intensity activity.
3. Adults should also undertake physical activity to improve muscle strength on at least two days a week.
4. All adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

RESEARCH

Analysis of the Danish National Health Survey [26] was able to assess self-reported distances to green spaces, BMI and exercise habits. It revealed that those who reported living over 1km, compared with less than 300m, to green space were more likely to be obese and less likely to exercise. Although based on self-reporting which may be biased, this study highlights the potential benefit of encouraging physical exercise through proximity to green space.

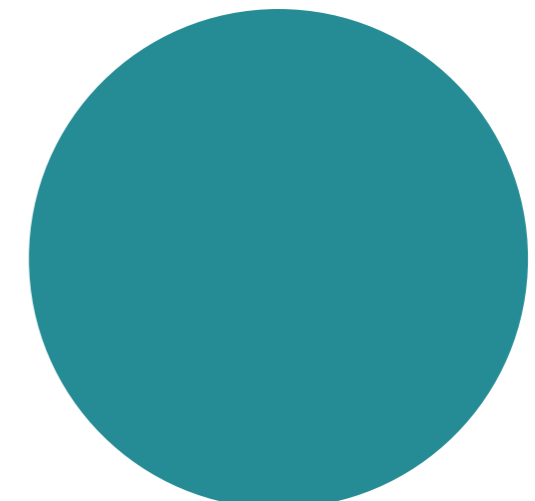
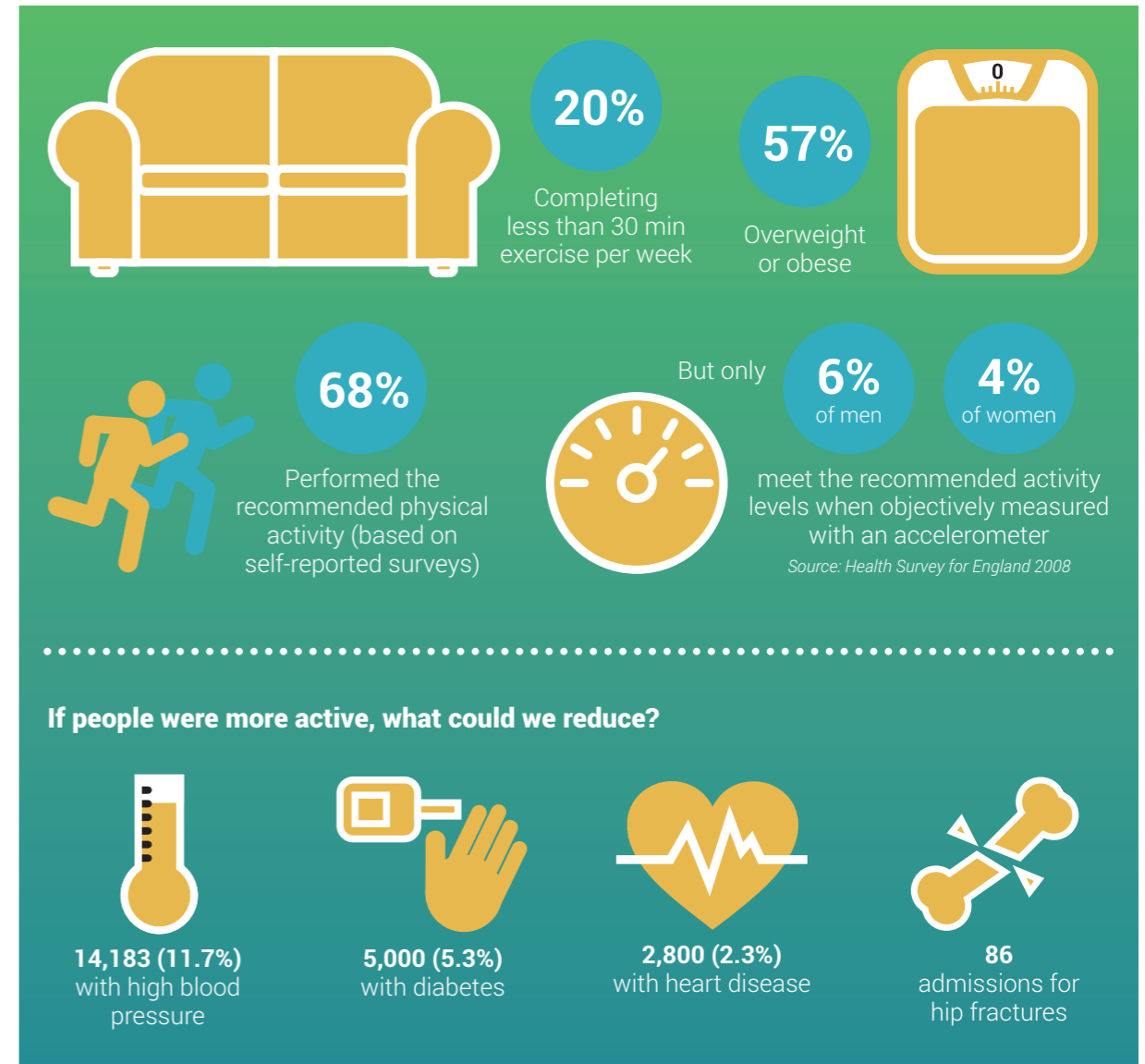
A study [27] in Bristol, UK, used data from the 2005 Bristol Quality of Life in your Neighbourhood survey of 6,821 adults and matched it with a mapping database of neighbourhood and green space information. After statistical analysis, they found that the amount of use reduced with increased distance from the green space, and those living near a formal park were most likely to achieve the recommended amounts of physical activity and were less likely to be overweight.



IN OUR AREA

In Bracknell Forest, current data shows 67.8% of adults (18-65) report meeting the physical activity guidelines set out by the Chief Medical Officer, yet 19.7% of adults complete less than 30 minutes exercise per week [28]. Less than half (43.6%) of adults do some amount of walking at least 5 times per week. 68.6% of 15 year olds are sedentary for over seven hours per day on average. A study by NHS Digital using an accelerometer found however that only 6% of men and 4% of women met the required levels of activity [29].

Over half of Bracknell Forest's adults are overweight or obese (57.4%), and this starts in childhood – 30% of Year 6 children are overweight or obese. 5.3%/5,000 have diabetes, 11.7%/14,183 people are living with high blood pressure and 2.3%/2,800 suffer from heart disease. 86 people were admitted to hospital last year having broken their hip. [30] [31]



CASE STUDY: SANDHURST HEALTH WALKS

By Kieth Naylor, Public Health Programme Officer

Led and organised by a group of local volunteers since 2014, the group has built a flourishing membership because they appeal to all walkers regardless of age and ability, with many using this gentle form of exercise as their "First Steps to Fitness" or to manage and improve various health conditions. Everyone is made to feel welcome; no-one is ever 'too slow' or made to feel that they need to keep up as everyone walks at a pace they feel comfortable.

Sandhurst Health Walks make the most of the local environment around the local community centre and offer a range of walks from between 10 to 60 minutes at different times of the day. Social health is also important and each walk ends with refreshments in the community café.



Communities and Health Inequalities

The wider determinants of health, as described in the introduction, have an important role in shaping our health and wellbeing. They were a key focus of the Marmot Review [32], which examined the health of our nation and identified a number of inequalities across our society – those of a lower socio-economic class have a lower life expectancy, a higher frequency of many diseases and poorer mental health. The mechanisms between a lower socio-economic class and poorer health are complex, but can include low quality housing, less healthy diets and lower educational achievement.

Green spaces have been shown to reduce these health inequalities, as the benefits of the natural environment may have a stronger effect for those in lower socio-economic groups. This may be in part due to smaller personal gardens and less aesthetic features in neighbourhoods, but there are often more barriers to the use of green spaces as well – such as crime, traffic and social isolation, which itself has been shown to be associated with increased mortality [33].

An important task of public health is to ensure improvements to health occur throughout society, and inequalities in our area are reduced. Improving green spaces in particular areas of deprivation or using initiatives that reduce isolation and loneliness might be one of the means for us to eliminate health inequalities in our area and improve our communities.



POLICY

The Marmot Review [32] of 2010 is a key piece of work that identifies many of the health inequalities in our society and gives recommendations for change. Policy Objective E, 'Create and develop healthy and sustainable places and communities' has a number of aims for the improvement and development of green spaces across the social gradient.

PRIORITY OBJECTIVES:

- Develop common policies to reduce the scale and impact of climate change and health inequalities
- Improve community capital and reduce social isolation across the social gradient

RECOMMENDATIONS:

- E1: Prioritise policies and interventions that both reduce health inequalities and mitigate climate change, by:
 - Improving active travel across the social gradient
 - Improving good quality open and green spaces available across the social gradient
- E2: Fully integrate the planning, transport, housing, environmental and health systems to address the social determinants of health in each locality.
- E3: Support locally developed and evidence-based community regeneration programmes that:
 - Remove barriers to community participation and action
 - Reduce social isolation.

RESEARCH

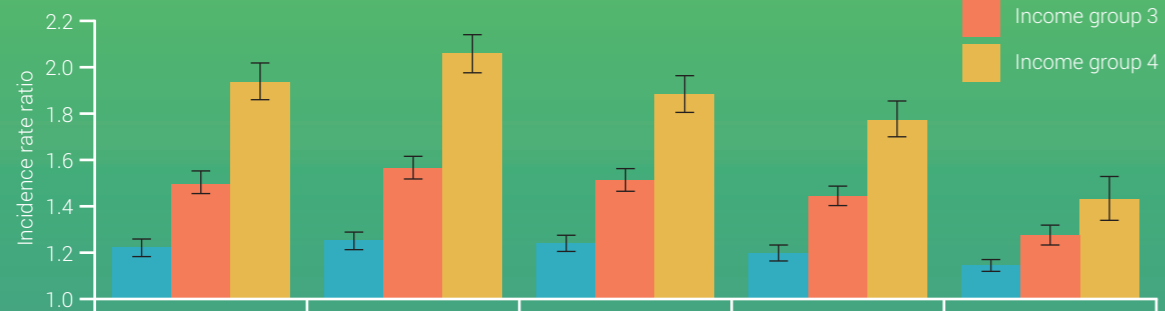
Mitchell and Popham [34] compared different socio-economic groups and the influence of green spaces on their health. Looking at people of working age in groups of increasing income and comparing them with the same groups in areas of increasing green space, they found that the difference in different health outcomes was reduced in areas with more green space. This can be seen in the graph below by the reducing size of the bars as you move left, which is areas of higher green space.

National data from the Monitor of Engagement with the Natural Environment survey, undertaken by Natural England from 2013 to 2015 [35] found that 12% of children had not visited the natural environment in the previous year, and these children were more likely to be of Black and Ethnic Minority origin or of a lower socio-economic class.

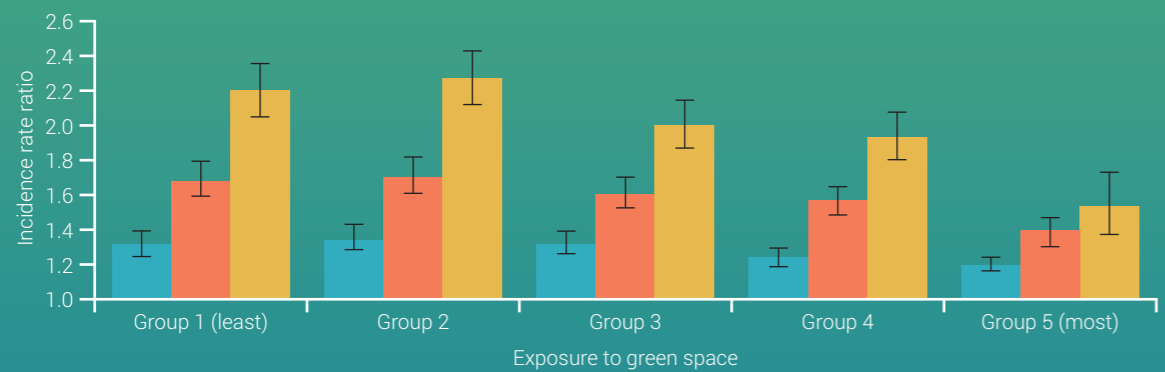
A study [36] in Chicago, USA, looked at the surrounding greenness of 98 publically owned apartment blocks. Residents were randomly assigned to any of the blocks. An examination of police data showed that there were fewer crime reports from apartment blocks with greener surrounding areas when compared to those with less green surroundings.



A All-cause mortality



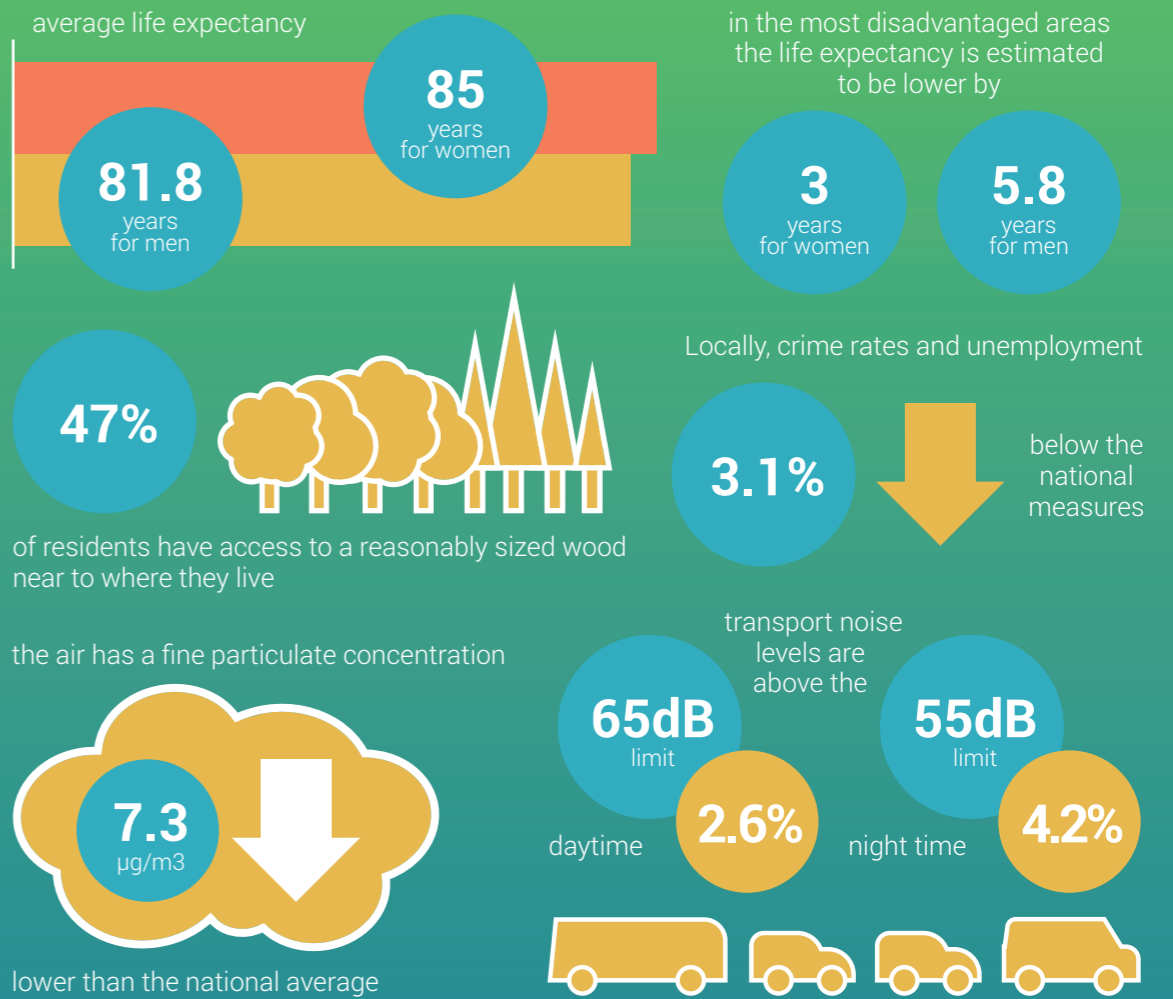
B Deaths from circulatory disease



[34] Mitchell and Popham, 2008

IN OUR AREA

The latest data for Bracknell Forest shows the average life expectancy is 85.0 years for women and 81.8 for men. However, in the most disadvantaged areas the life expectancy is estimated to be lower by 3 years for women and 5.8 for men, compared to the least disadvantaged areas. There are lots of ways to measure the potential causes – they are often the wider determinants of health discussed earlier in the report. Locally, crime rates and unemployment (3.1%) are below the national measures. In terms of pollution, the air has a fine particulate concentration of 7.3µg/m³ (lower than the national average), and transport noise levels are above the 65dB limit in daytime for 2.6% of residents, rising to 4.2% for the night time 55dB limit. In terms of personal isolation, only 49% of adult social care users have as much social contact as they would like. As many as 47% of residents have access to a reasonably sized wood near to where they live. [37]



CASE STUDY: SUMMER OF FUN
By Amanda Hales-Owen, Children's Centre Manager

In 2017 the four children's centres in Bracknell Forest took part in the 'Summer of Fun'. A team of Children's Centre Project Workers provided arts and crafts and fun activities for children 0-5 and their families at seven parks across the borough, including in areas of deprivation. The families accessed the events for free and a good time was had by all, although umbrellas and welly boots were required for some of the events. All the activities provided were planned to support children's development and learning and gave ideas to parents and carers of how they could use the activities at home to build on their children's development and have fun together with low cost activities.



OPPORTUNITIES AND CHALLENGES

New Developments and Regeneration

The planning of our local area can influence our health behaviours. Quality, easily accessible green space can enable us to exercise, accessibility to services allows walking and there can be opportunities for social engagement.

With local pressures on housing and the demand for new homes to be built in our area, there are both opportunities and challenges to the amount of quality green space. As urbanised areas already become increasingly built up, there is the need to use green areas on the peripheries of towns to provide enough quality accommodation for our population, often against the wishes of some residents. Although green views can be lost, the majority of these developments take place on private land which is not generally accessible by the public. With careful planning, new developments on previously private land could actually result in more publically accessible green space.

A variety of national policies and frameworks exist to assist local authorities concerning the provision of green spaces. These take the form of general advice through to specific quantifications of how much should be provided and for what purpose. These

policies are often used by planning authorities to develop local policies that are relevant to the local situation.

To deliver safe, quality homes and neighbourhoods for all groups in our community it is important to find ways to balance the loss of green areas, the need for more housing and the opportunity to develop new green spaces and use investments to benefit the wider community. By engaging with the planning process and ensuring health and wellbeing of residents is considered in planning, we have the opportunity to develop new assets to improve our neighbourhoods.

POLICY

The Six Acres Standard [38] is a commonly used set of measures to guide local planners as to the amount of recreational space that should be in a community. It was developed by the National Playing Fields Association (NPFA, operating name Fields in Trust), and has existed in various forms since the 1930s with a specific recent update in 2008. It aims to inform policy that will result in the protection, improvement and green spaces focused on sport and play. Many Local Authorities include the standard in their open spaces policies.

Fields in Trust recommended benchmark guidelines - formal outdoor space [38]

Open space typology	Quantity guideline (hectares per 1000 population)	Walking guideline (walking distance: metres from dwellings)	Quality guideline
Playing pitches	1.2	1200m	<ul style="list-style-type: none"> Quality appropriate to the intended level of performance, designed to appropriate technical standards Located where they are of most value to the community to be served Sufficiently diverse recreational use for the whole community Appropriately landscaped Maintained safely and to the highest possible condition with available finance Positively managed taking account of the need for repair and replacement over time as necessary Provision of appropriate ancillary facilities and equipment Provision of footpaths Designed so as to be free of the fear of harm or crime Local authorities can set their own quality benchmark standards for playing pitches, taking into the account the level of play, topography, necessary safety margins and optimal orientation Local authorities can set their own quality benchmark standards for play areas using the Childrens' Play Council Quality assessment tool
All outdoor sports	1.6	1200m	
Equipped/ designated play areas	0.25	LAPs -100m LEAPs - 400m NEAPs - 1000m	
Other outdoor provision (MUGAs and skateboard parks)	0.3	700m	

The National Planning Policy Framework [39] features a number of policies relating to green and open spaces. They include:

- Promoting healthy communities, through access to high quality open spaces and opportunities for sport and recreation
- Protection for existing facilities and the 'Local Green Space' designation, which can be used to

afford special protection for green areas of particular local importance due to their use or features

- Protection of green belt land and the need to positively enhance beneficial use of the land through increasing access, biodiversity of improvement of damaged land

INCREASING ACCESS

Another way we can maximise the benefits of green space in our area is to make best use of existing spaces. This can be through improving the quality of already available spaces, opening previously private areas and finding new ways to encourage their use.

Access to green spaces can be increased by removing the barriers to their use. These can vary for different groups, and are not restricted to their quantity or closeness to home. Personal concerns for safety, the quality of the spaces, the weather or poor transport infrastructure can prevent people using green spaces.

Local authorities can work to remove these barriers, alongside the wide range of other organisations who aim to improve the natural environment, encourage people to use it and increase healthy behaviours. Finding new ways to collaborate and strengthening existing links can allow us to make the most of the potential benefits for the green spaces already in our area.



RESEARCH

Volunteering with the Wildlife Trusts [40] improved peoples' mental wellbeing in 6-12 weeks in a study looking at 139 people, some of which were referred by healthcare providers, who volunteered with the Wildlife Trusts as they took part in nature conservation volunteering activities. 95% of participants with low self-reported wellbeing at the start of the project reported an improvement in 6 weeks, this level increased further over the following 6 weeks. Participants reported significantly enhanced feelings of positivity, increased general health and pro-environmental behaviour, higher levels of physical activity and more contact with green space at 12 weeks.

An Australian study [41] combined an audit about public open spaces in Perth with over 1,800 personal interviews. After statistical analysis, they found that those with very good access to large, attractive open spaces were 50% more likely to report high levels of walking, when compared with those do not have access to quality public spaces. This is evidence that the proximity and quality of spaces increases their use.



POLICY

A briefing [42] from the UCL Institute of Health Equity and Public Health England suggests some ways to increase 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.

The Accessible Natural Greenspace Standard (ANGSt) was developed by Natural England to aim to quantify the need for local, useable space near communities. The standards state:

'All people should have accessible natural green space:

- of at least two hectares in size, no more than 300m (five minutes' walk) from home
- at least one accessible 20 hectare site within 2km of home
- one accessible 100 hectare site within 5km of home
- one accessible 500 hectare site within 10km of home'

These criteria account for the need for immediately local smaller spaces, as well as larger areas for sports and walking and are a means by which we can measure the depth and breadth of green spaces around us. Applying the standards to our area might enable us to find particular spaces that could be opened for residents for the widest benefit.



CASE STUDY: HERITAGE PARKS VOLUNTEERS By Kath Moss, Heritage Parks Manager



The Heritage Parks Team manages and maintains the two key historic parks within Bracknell Forest. With just four members of staff, and a management responsibility for over 110 acres of notable historic landscape, a volunteering scheme was set up in March 2015. The idea was to provide assistance within the grounds, but also the opportunity to engage with members of the local community to ensure their needs were being met, and to encourage them to feel a sense of ownership over their local environment.

This initiative proved more challenging to get established than first imagined, with response rates and retention rates both low, and much creative thinking was required to solve logistical issues. The Heritage Parks Team have also had to learn about mental health issues, covering subjects ranging from autism, schizophrenia and PTSD, to depression, suicide and alcohol awareness in order to provide a safe working environment for the volunteers.

However, after 3 years, we now have not one, but two volunteering groups – one at South Hill Park and one at Lily Hill Park. They meet every week, regardless of the weather and the fact that some even came in the recent snow shows their enthusiasm and dedication. The group has achieved a huge amount already and over the past 12 months alone, volunteers have donated over 2,400 hours across the two parks.

Many of the volunteers are socially isolated and the group provides an opportunity for them to reach out, meet new people and make friends. Several volunteers have commented that it keeps them physically active, they are starting to get fit and it provides an opportunity to 'get out of the house' and have a purpose. They have increased their knowledge on horticulture in many ways, learning how to prune, identify weeds, learn wood work techniques, path repairs and much more.

It has become a vital lifeline for many of the volunteers involved.

When asked about their experiences at the Heritage Parks volunteering groups, the volunteers were keen to share their thoughts:

"I enjoy the social aspect, it's good to be working with people because I live alone and spend a lot of time in solitude. I enjoy getting out and meeting people, as well as the physical exercise, and it gives me a sense of self worth that I'm doing something productive for the community. I get judgmental comments from my old school friends and when I tell them I do this I feel a sense of dignity as I actually do a bit of work during the week. It's good to be outside and good to feel alive."

"I have learnt new skills, like how to prune the trees and what the plants are. It's good for my own personal mental health as it gets me out of the house into the fresh air with a lovely bunch of people and I'm able to give something back to the community."

The volunteer group celebrated their success with the RHS Thames & Chiltern In Bloom Award at South Hill Park (Gold Award and a National Certificate of Distinction).

CONCLUSIONS

Green spaces can fundamentally define the spaces in which people live and work. The natural environment can have wide ranging health benefits for individuals and our communities and therefore have an important role to play in helping to reduce health inequalities.

Green spaces are free at the point of use and are an accessible asset for all communities, including those who may not be willing or able to pay to use other public or private facilities. It should be noted that green spaces are assets of value in their own right and are often valued for their relatively undeveloped and unspoilt nature. The quality of such spaces and their benefit to communities depends upon appropriate design and management of them.

We have examined how there is clear evidence for a range of improvements to health and wellbeing, including but not limited to:

- Mental health
- Pregnancy
- Childhood development
- Reduction in cardiovascular disease
- Increasing physical activity
- Reducing health inequalities
- Improving cohesion in communities

We have been able to showcase the wide range of success stories from the local authority and other organisations that are increasing our health and wellbeing by using the natural environment.

We also considered the current health of our population, particularly in the areas that could be improved by green spaces.

There are opportunities and challenges to using green spaces, and we have also considered some of the limitations to achieving these benefits and a few of the ways we might make more use of the assets in our area.

RECOMMENDATIONS

1. Local authorities and other agencies should continue to encourage community initiatives that make the most of natural space available, with the aim of improving mental health, increasing physical activity and strengthening communities.
2. Existing green space should be improved and any new developments should include high quality green spaces. The use of professional design and arrangements to ensure the ongoing management of natural environments should be considered if spaces are to be sustainable.
3. Opportunities to increase active transport should be considered when designing new green spaces and in the improvement of existing space.
4. Planning guidance for new developments should specifically consider the use of green and blue space to improve the health and wellbeing of residents and others using the space.
5. Local Authorities and their public health teams should foster new relationships with organisations aiming to improve the natural environment and its use.

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