

# Active travel and healthy workplaces

*“Many of us spend the majority of our waking lives either at, or travelling to our workplaces. As my recent review of the health of Britain’s working age population highlighted, the working environment has a crucial role to play in promoting the benefits of a healthy active lifestyle - and that very much includes the opportunity to include physical activity as part of the daily commute. The benefits of this are significant and wide-ranging: active staff are more motivated and less prone to sickness, leading to financial reward for employers. A healthy workplace is therefore something for all responsible and forward-looking businesses to aspire to. Office wellbeing programmes and facilities to encourage more active travel are a good way to start.”*

Dame Carole Black,  
National Director for Work and Health

*“Employers today cannot afford to ignore the health and wellbeing of their workers. The consequential costs of physical under-activity, for example, can be huge in terms of health and reduced productivity at work. Measures such as encouraging workers to walk or cycle to and from work can help make a difference. That sort of*

*employer investment in helping motivate a healthy and active workplace can be well worth the effort.”*

Miles Templeman,  
Director General,  
Institute of Directors

## Introduction

We have better healthcare, less physically demanding lives and safer workplaces than previous generations, yet we take more time off work due to sickness. During 2007, 172 million working days were lost to the British economy, at a cost of £20 billion to business and the public sector<sup>(1)</sup> and up to an estimated £100 billion to the wider economy<sup>(2)</sup>.

A growing body of research from around the world indicates that people who are active in their daily lives are more productive employees and have better attendance records. Employers may therefore find that it is in their direct interest to help their staff travel more actively.

In general terms healthier employees benefit their employer through:

- reduced absenteeism<sup>(3)</sup>
- lower turnover rates<sup>(4)</sup>
- improved productivity and employee morale<sup>(5)</sup>
- lower health care costs<sup>(6)</sup>.



Active Travel works with policy-makers and practitioners to promote walking and cycling as health-enhancing physical activity. Sustrans is the UK’s leading sustainable transport charity and works on practical projects to encourage people to walk, cycle and use public transport to benefit health and the environment.

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In her review of the health of Britain's working age population, Dame Carole Black writes: "The workplace can be a key setting for improving people's health and well-being. Good health improves an individual's quality of life, and a focus on their well-being can also add value by... increasing motivation and engagement of employees, in turn helping to drive increases in productivity and profitability"<sup>(2)</sup>.

Employers are increasingly concerned by the cost of absence and sickness. These concerns can be addressed by encouraging staff to participate in regular physical activity, such as walking and cycling to work. For example, there is evidence that physical activity interventions can be an effective strategy to help people with lower back pain – the main cause of lost working time in the UK – to make an earlier return to work<sup>(7)</sup>.

## Physical activity is good for you

The more people are active the less they are at risk of major diseases such as coronary heart disease (CHD), obesity, stroke, diabetes, arthritis, osteoporosis, some cancers and mental health problems. Incorporating physical activity into the daily routine can help towards prevention and recovery from ill health.

The government has set a target in England and Wales for 70% of the population to be "reasonably active" by 2020 while in Scotland the target is for 50% of adults to achieve the minimum levels by 2022<sup>(8)(9)(10)</sup>. Currently the figure for England is only 40% for men and 28% for women<sup>(11)</sup>.

The Chief Medical Officer has stated that the target, 30 minutes of moderate intensity activity such as brisk walking on at least 5 days per

week, will only be achieved by helping people to build activity into their daily lives. His 2004 report on physical activity says, "for most people, the easiest and most acceptable forms of physical activity are those that can be incorporated into everyday life. Examples include walking or cycling instead of driving"<sup>(12)</sup>.

## Workplace health promotion

Employee fitness programmes have been shown to reduce absence, increase productivity and cut healthcare costs<sup>(13)</sup>, particularly when tailored to individual needs and abilities<sup>(14)</sup>.

The insurance company Provident initiated a 'Wellbeing at Work' programme that promoted active travel alongside other health interventions (e.g. smoking; weight loss). The company's 430 staff were encouraged to cycle to work and pedometers were issued in conjunction with workplace walking challenges. They found that staff turnover fell by 4% after one year<sup>(15)</sup>.

Research by PriceWaterhouseCoopers (PWC) illustrates a slow overall uptake of workplace health programmes by employers in the UK, who have generally "not considered it their role". This is despite evidence from PWC's own review of 55 case studies indicating a cost benefit ratio of workplace health and wellbeing interventions of up to 34:1, with 81% experiencing less sickness absence and 33% reporting less staff turnover<sup>(16)</sup>.

The development of Health Promoting Universities (HPU) in the UK since the mid-1990s represents one example of a shift away from top-down health interventions to a more structured 'whole system' commitment to wellbeing. Led by the University of Central Lancashire, HPUs apply a holistic 'settings approach' to

## Fighting obesity

The 2007 Foresight report on obesity describes the condition as having reached epidemic levels in the UK. However, its prevalence is set to rise still further – half the UK's adult population could be clinically obese by 2050, at a cost of £49.9 billion a year<sup>(21)</sup>. In particular, England presently has the highest prevalence of obesity in the EU and faces an associated rise in rates of diabetes<sup>(22)</sup>. Excess weight is also linked with increased risk from stroke, cancer and CHD.

Through measures such as implementing travel plans and providing active commuter facilities, employers increasingly recognise that they have a role to play in supporting staff to be healthy and active. Listing its top five policy responses to counter obesity levels, Foresight includes the need to "increase the responsibility of organisations for the health of their employees," as well as: "increasing walkability/cyclability of the built environment"<sup>(21)</sup>.

The notion of employer obligation to the health of their workforce is explicit in the recent cross-government obesity strategy, Healthy Weight, Healthy Lives. The strategy calls for businesses to boost their investment in employee health, from which they have much to gain: "Employers will reap the benefits in improved productivity, high staff morale and retention, and reduced sickness absence costs"<sup>(23)</sup>.

Obesity can adversely impact upon employee productivity and performance. A longitudinal study of American oil workers examined the economic cost of obesity to employers. Obese workers were found to be 80% more likely to have absences and were absent 3.7 more days per year<sup>(24)</sup>.

organisational health within in a higher learning environment. The aim is, “to integrate a commitment to health into the fabric of settings - within their cultures, structures, processes and routine life.” With increasing government recognition, the HPU Network is moving into the next stage of project evaluation and analysis<sup>(17)</sup>.

## Stress and productivity

Work-related stress, depression and anxiety are the most common causes of lost productivity – amounting to approximately 13.8 million lost working days in 2006/7<sup>(18)</sup>. Poor mental health is linked to poor physical health<sup>(19)</sup>, and people who are physically active report having fewer symptoms of anxiety or emotional distress than inactive people<sup>(12)</sup>.

In its ‘Mental Health and Well-being Commendation’ awards, the Scottish Centre for Healthy Working Lives advocates the promotion of physical activity to counteract workplace stress: “If you are encouraging staff to be more active... you will be helping them to reduce their stress and anxiety and to improve their self-esteem”<sup>(20)</sup>. Stress risk assessments and mental health awareness programmes form part of its campaign to reduce days lost to ill health by 30%.

## Encouraging everyday physical activity

Today’s modern lifestyle encourages low activity levels, with work and leisure both becoming more sedentary in nature. In the UK, 25 million people travel to work every day and most – around 71% – choose to do so by car<sup>(25)</sup>. People spend 8% less time walking and cycling than they did a decade earlier<sup>(26)</sup>.

Research suggests that employers can benefit from establishing workplace exercise programmes. Evidence from three international studies suggests that workplace health

promotion programmes of at least 12 months duration can lead to increases in physical activity and reductions in absenteeism of at least one third<sup>(27)</sup>.

However, participation rates may be low, and programmes may appeal to employees who are already reasonably fit and healthy<sup>(28)</sup>. An alternative, or indeed complementary, approach is to provide facilities and incentives for staff, particularly the most sedentary, to build healthy physical activity into their daily lives, by ‘active commuting’ – walking or cycling to work.

In a 2008 speech, Alan Johnson, Secretary of State for Health stated: “If every employee were to walk, cycle or jog at least part of their journey to work each day, we would increase the number of adults doing enough regular exercise from a desultory three out of ten to seven out of ten”<sup>(29)</sup>. This focus on active commuting informs recent guidance on healthy workplace from the National Institute for Clinical Excellence (NICE) [see boxout]. Previous NICE guidance has highlighted how the built environment can influence public health and levels of active travel, recommending that high quality walking and cycling routes be at the heart of all new workplace designs<sup>(30)</sup>.

‘Well@Work’, launched in 2005, is a government-backed national workplace health intervention lasting 3 years. The programme reached around 10,000 employees in 32 workplaces across England. Evaluation of the national project concluded that work-based interventions have the potential to deliver real improvements to employee health and physical activity levels. However for these to be made sustainable, support for healthy lifestyles must be fully integrated into wider organisational policy. Well@Work suggests a timeframe of up to 5 years for the benefits of a workplace health programme to be fully realised, demanding a long-term strategic approach with realistic goals<sup>(31)</sup>.

## NICE Guidelines: Workplace Physical Activity

Newly published guidance from the National Institute for Health and Clinical Excellence (NICE) on ‘Promoting physical activity in the workplace’ reassert the role of the workplace as an effective health promotion setting: “Efforts made in the workplace, alongside wider strategies to increase physical activity levels, could help improve people’s health significantly”<sup>(32)</sup>.

The NICE guidelines call on employers to invest in strategies that encourage all staff to be more active, with active travel to work playing a crucial role.

### Key recommendations include taking action to:

- encourage employees to walk, cycle or use another mode of transport involving physical activity to travel part or all of the way to and from work
- provide information about walking and cycling routes and encourage staff to monitor and set goals for the distance they walk and cycle
- introduce and monitor an organisation-wide programme to increase physical activity
- set organisation goals for physical activity levels and dedicate resources to achieving these
- maximise opportunities for all staff to participate in physical activity programmes, for example through incentive schemes and consultation
- distribute information on how to be more physically active and the benefits of doing so.

## The value of active travel

Walking and cycling to work provides the opportunity for a considerable proportion of the working population to perform regular physical activity<sup>(33)</sup>. They are potentially the most accessible and the least expensive forms of exercise, since they can be built into the normal structure of the day. Developing workplace travel plans<sup>(34)</sup> and encouraging active commuting can therefore be among the most practical and effective ways to increase employee physical activity levels.

Distance to work is an important factor in how people form travel decisions. Research from Australia demonstrates how reduced commute distances make it more likely that employees will walk or cycle. For example, when respondents lived less than 2km away from their workplace, 87% of participants perceived they could, and 34% actually did commute by walking or cycling. These figures dropped considerably to 30% and 3%, respectively, for commute distances of 5km or more<sup>(35)</sup>. This is especially pertinent to the UK where workers have the second longest daily commute in Europe – an average of 8.7 miles<sup>(25)</sup>.

### Health benefits of active commuting

There is ample evidence demonstrating the general health benefits of routine walking and cycling as physical activity. A 2007 Evidence Review examined international research from a 25-year period relating physical activity to productivity. The results found that an increase in physical activity of more than one hour per week, such as walking or cycling to work, would be expected to lead to a measurable reduction in levels of absenteeism<sup>(27)</sup>.

Research from Finland provides clear evidence for the health benefits of active commuting. A study of 47,840

participants aged 25–64 years found that moderate or high levels of walking or cycling to work resulted in a reduced risk of death from CHD<sup>(36)</sup>. It also reduced risk of death in people with hypertension<sup>(37)</sup>.

In a meta-analysis of eight studies totalling over 173,000 participants, active commuting was found to have a robust protective effect against cardiovascular disease<sup>(38)</sup> (alone responsible for 37% of all deaths in the EU<sup>(39)</sup>). This effect – up to an overall 11% reduction in risk – was more pronounced in women. The authors conclude that: “Active commuting, such as cycling and walking to work, provides a feasible method of integrating regular physical activity into the increasingly sedentary lifestyles of western populations”<sup>(38)</sup>.

In addition to walking or cycling, there is also evidence that people who access work by public transport walk substantial distances to and within bus and railway stations that can contribute to their health<sup>(40)</sup>.

### Walking

Walking is the most widely available form of physical activity, whether transport related or for leisure. It remains the dominant form of transport for journeys under one mile, although the overall number of walking trips has fallen 16% over the last decade<sup>(41)</sup>.

There is strong evidence that interventions which promote moderate intensity physical activity and are not facility dependent (particularly walking) are associated with longer-term changes in behaviour<sup>(42)</sup>. An example as to the benefits of routine walking comes from the Whitehall Study in England, which followed 6,702 men aged 40–64, over 25 years. Brisk walking pace demonstrated reduced mortality from all-causes, CHD and other cardiovascular disease, all cancers and respiratory disease following adjustment for risk factors which included age, employment grade,



smoking, body mass index, and lung capacity<sup>(43)</sup>.

Recent evidence using analysis of GIS (geographical information systems) data contributes to a growing awareness of how the built environment influences transport-related walking. A study of 2,650 Australian households cited workplace proximity as the most significant contributor to walking, especially among women. Regular walking to work was found to result in the accrual of sufficient physical activity for health benefits – estimated at an average of 166 minutes each week<sup>(44)</sup>.

## Cycling

Cycling, the mode of transport which may offer most potential for growth on the commuting journey, can yield much the same improvements in physical performance as specific fitness training programmes. Researchers at the Free University of Amsterdam measured the fitness of commuters after a six month trial period of physical activity: the higher the total distance cycled, the higher the gain in maximal external power and maximal oxygen uptake. For those with a low initial fitness level, cycling just 3km, four days per week was enough to improve physical performance<sup>(45)</sup>. This confirms that the greatest health gains are to be achieved when the least active individuals become moderately active.

The most impressive evidence comes from population studies. A study of adults in Copenhagen, including 6,954 who cycled to work, found that cycling has a strong protective function, with a 39% higher mortality rate amongst those who did not cycle even after adjustment for other risk factors including smoking and leisure time physical activity<sup>(46)</sup>.

In the UK, the growth of the National Cycle Network has enabled more people to walk and cycle to work. Commuting on the Network accounted for 12% of all trips in 2007, with an average urban (traffic-free) commute of

just under 5 miles – the same distance as nearly two-thirds of car journeys<sup>(47)</sup>.

## Climate change

Transport currently represents the fastest growing source of greenhouse gas emissions<sup>(48)</sup>. With work-related travel accounting for 15% of all trips<sup>(25)</sup>, there is significant potential for changes in commuting behaviour to contribute towards the UK's long-term goal of a 60% reduction in carbon dioxide emissions by 2050<sup>(49)</sup>.

Measures to curb excessive vehicle use and encourage active travel are practical ways in which businesses can make their operations more sustainable. Work-related travel constitutes nearly 40% of miles driven by car<sup>(48)</sup> and has more than doubled as a proportion of total fossil resources consumed, from 6% in 1968 to 13% in 2000<sup>(50)</sup>.

## Conclusion

With an aging workforce, the health of the working population is likely to come increasingly to the fore. Regular participation in physical activity including walking or cycling to work, helps to maintain good health and allow for a productive working life. This in turn benefits the national economy through greater productivity and lower health care costs.

Walking and cycling are accessible, affordable ways in which people can reduce their risk from non-communicable disease. They hold the greatest potential health benefit for those who are currently inactive. For this group, active commuting can bring significant improvement to quality of life, such as lowering of stress or back pain at work. A reduced risk of mortality and morbidity is also to be gained from leading a more active lifestyle.

Companies are increasingly recognising the benefits of investment in workplace health. However, there is scope for business to do more, including setting targets for active



commuting or implementing physical activity interventions to engage currently inactive employees. Such promotions form an important element of a successful occupational health programme and have been proven to result in financial benefits.

The UK has comparatively low levels of walking and cycling, with the majority of the working population commuting by car. By making a greater commitment to physically active modes, the government can promote a healthier society and reduce road congestion. Active travel is a sustainable and viable alternative to motorised transport. As such, walking or cycling to work can play a valuable role alongside other transport policies in protecting the environment by reducing emissions and fossil fuel dependence.

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