

The healthy commute

What impact does cycling to work
have on employee health?



Foreword

By Jane Ellison MP, Minister for Public Health, Department of Health



Physical activity is an important part of a healthy lifestyle, and cycling to work is a great way to ensure regular exercise, especially for those with hectic schedules.

I am pleased to see from this report that the majority of participants in the Cycle to Work Scheme, including employers, recognise the benefits of keeping fit, and that many participants have noticed improvements to their health since joining.

Regular exercise can reduce the risk of dying early by 30 per cent and halve the risk of developing type 2 diabetes. However, over the years we have inadvertently designed physical activity out of modern life, and more than 28 per cent of adults in England do less than 30 minutes a week. International evidence demonstrates that countries in which cycling is a more common mode of transport enjoy greater participation in physical activity overall. Holland stands out in this regard.

The Government has made almost £700m available through the Local Sustainable Transport Fund, Community Linking Places Fund and Cycle Safety Fund in support of our ambitions for cycling and sustainable travel, with an additional £114m to give more people the opportunity to cycle safely and confidently in more places across the country.

All of this is underpinned by NICE Guidance published in 2012 on local measures to promote walking and cycling, which will help to guide action across the new public health system.

I therefore welcome this research and what it tells us about the contribution that cycling to work can make to public health, and indeed, to an individual's own sense of wellbeing.

A handwritten signature in black ink that reads "Jane", underlined with a thick black stroke.

Jane Ellison MP, Minister for Public Health

Introduction

Cycling is becoming an ever more popular form of commuting for Britons. Success at the 2012 London Olympics, inflation-busting rail fares and increasing prominence in both the media and political spheres has led to more and more people getting on their bikes to get to work.

A key benefit of this move towards cycling as an increasingly mainstream form of transport is the health benefits it brings. Physical activity is a vital element of a healthy lifestyle. According to the Chief Medical Officer, adults between the ages of 19 and 65 should aim to do 150 minutes of moderate intensity activity per week. However, 28.5% of adults in England do less than 30 minutes of moderate physical activity per week (Public Health England, 2012).

For many people, cycling to work provides a way they can improve their level of physical activity, without taking time out of their daily schedule. Cycling as a mode of commuting is therefore integral to the Government's public health objectives.

As of April 2013, local authorities hold responsibility for achieving the Government's public health objectives. New bodies have been created at local level to guarantee that the Government's commitment to improving public health is realised.

The Cycle to Work Alliance has conducted this research in order to determine the impact of the cycle to work scheme in contributing to public health objectives across the United Kingdom.

The Cycle to Work Scheme

The cycle to work scheme is a tax-efficient employee benefit operated mainly through salary sacrifice arrangements in order to encourage more adults to take up cycling.

The conditions for the tax exemption to apply are set out in the Income Tax (Earnings & Pensions) Act 2003 (ITEPA). It encourages employers to loan bicycles and cyclists' safety equipment to employees as a tax-exempt benefit for the purpose of cycling to work.

Under the scheme, employers who use a scheme administrator buy bicycles and cycling equipment from their approved suppliers, and hire it to their employees. At the end of the loan period, the employer may choose to give the employee the option to purchase the equipment.

The scheme is a vital way in which the benefits of cycling can be promoted. The savings that individuals make through the cycle to work scheme improves the affordability of, and access to, cycling. Employees who participate in schemes run by Alliance members save up to 42% on the cost of a new bike.

The cycle to work scheme is an effective measure through which employers can encourage a healthy workforce. However, it is not the only solution, and employers should look at implementing a number of measures that encourage their staff to be active.

This report analyses the results of a survey of employees using, and employers offering, the cycle to work scheme, focusing on its vital roles in improving public health.

Health benefits of cycling – to work and everywhere else

By Philip Insall, Director, Health, Sustrans

Back in 2004 the Health Select Committee considered evidence on the obesity epidemic. It reported: *“If the Government were to achieve its target of trebling cycling in the period 2000–2010 (and there are very few signs that it will) that might achieve more in the fight against obesity than any individual measure we recommend within this report”* (Stationery Office, HC).

For at least two generations, cycling and walking have been in decline. This loss of physically active travel has been a significant contributor to ill-health of many types; public and media attention often focus on obesity but in fact the impact is much wider.

We need to reverse this trend, and to use all the tools available to get more people active through travel. More cycle commuting would mean better health and less disease, not to mention lower NHS costs and less employee sickness.

Physical activity is wonderful medicine, which radically reduces people’s risk of coronary heart disease; stroke; many forms of cancer, type 2 diabetes; depression and other forms of mental illness; loss of bone strength; obesity and other forms of non-communicable diseases.

Maybe the best known figure comes from a long term study of more than 30,000 Danes: those who cycled to work had a 40% lower chance of heart disease (Andersen et al, 2000).

Many people have made the point: if a drug were invented tomorrow which promised the disease reduction you can get from cycling to work, it would be regarded as a miracle cure.

“Many people have made the point: if a drug were invented tomorrow which promised the disease reduction you can get from cycling to work, it would be regarded as a miracle cure.”

This means that investment in active travel is very good value for the health gains alone. When in 2010 the then Chief Medical Officer called for a doubling of walking and an eight-fold increase in cycling (DH, 2010) , he prompted a study by public health economists which found that within 20 years this would lead to savings of roughly £17 billion (in 2010 prices) for the NHS in England and Wales (Jarrett et al, 2012). Post 2030 these gains would, of course, continue to increase in value as the effects spread through an ageing population.

Across the world, public health professionals are now demanding action in favour of active travel, as part of the solution to the growth of non-communicable diseases. Such high level policy support includes the four Chief Medical Officers of England, Scotland, Wales

and Northern Ireland and the National Institute for Health and Clinical Excellence. The UK Government’s own Foresight Tackling Obesities report noted that *“the top five policy responses assessed as having the greatest average impact on levels of obesity [include] increasing walkability / cyclability of the built environment”* (Government Office for Science, 2007).

In the research sector, academics in the UK and around the world are expanding the evidence base and improving the detail around the beneficial health impacts of active travel and in particular, cycle commuting. But the scale and breadth of official policy support even now leaves no room for doubt: individuals, employers and society as a whole have much to gain from a massive shift to cycle commuting.

The research

In order to find the importance of the cycle to work scheme to meeting public health objectives, the Alliance surveyed over 18,000 users of the scheme and 700 employers who offer it.

Of the companies who responded, 57% were small and medium enterprises.

The results, presented in this report, show that the vast majority of users of the scheme notice health benefits from their active commute to work.

Moreover, it highlights the importance of these health benefits in the employers' decision to offer the scheme.

Finally, the report gives a sense of the importance of the scheme in encouraging people to move towards a healthier form of commute. For almost all scheme users, the financial savings they can make on the cost of their bike or safety equipment is the driving force behind their decision to join the scheme.

We hope you find this report and the findings of our research interesting.

Key findings

- 1. £5.1bn financial savings to Government** over 10 year period through health benefits that accrue through current participation levels in the cycle to work scheme.
- 2. 85% of participants** noticed a health benefit as a result of cycling to work.
- 3. 97% of employers** see the scheme as crucial in helping to achieve a healthier workforce.
- 4. 72% of users** would not have bought their bike had it not been available through the cycle to work scheme.

The challenge

So what is the picture of health like today? Sadly, the response to this question is not at all reassuring. Physical inactivity, high rates of heart disease, and worrying levels of obesity all need to be addressed by Government to ensure the UK population is as healthy as it can be.

Let's start with physical inactivity. There are innumerable studies concerning the health impact of physical inactivity. From doubling health risks, to adding a disease burden to

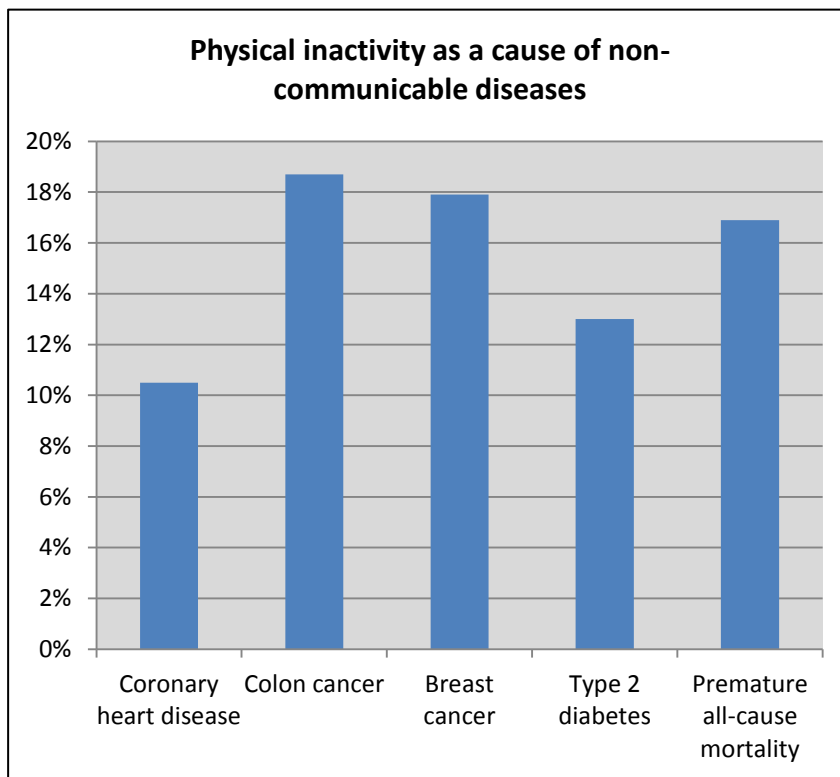
society that rivals smoking, the implications of an inactive lifestyle are well known, and they are prodigious.

Unfortunately, this threat does not reflect in rates of physical activity across the UK. Public Health England's most recent Active People Survey (2012) reports that 28.5% of

adults in England do less than 30 minutes of moderate-equivalent physical activity per week, while in Scotland only 37% of adults meet physical activity guidelines (Scottish Government, 2012). This figure drops to 29% for Wales (Welsh Health Survey, 2012). In Northern Ireland, the figure is a similarly disappointing 32% (Department of Culture, Arts and Leisure, 2013).

We know, as Sustrans' Philip Insall makes clear in this report, that there is a clear and undeniable causal link between physical inactivity and poor health. This manifests itself in many forms.

For instance, a recent report commissioned by the Department of Health has warned that **three quarters of the British population could be suffering from the effects of heart disease, diabetes and related illnesses by 2030** (Centre for Workforce Intelligence, 2013). Physical



inactivity is a common cause of all of these illnesses.

This manifestation of poor health as a result of physical inactivity not only impacts individuals, but has a tangible effect on businesses and employers. PWC estimates that **British businesses lose**

£32 billion in lost output each year as a result of absenteeism (PWC, 2011).

Britain has some of the highest absenteeism rates in the developed world, and a key policy lever for addressing this is improving public health outcomes through increasing levels of physical activity.

The challenge

Finally, for the NHS, the impact of physical inactivity is egregious. The Department of Health puts **the cost for obesity-related illnesses at £5 billion per year**. The direct **financial impact of physical inactivity to the NHS has been estimated at £1.06 billion** (NICE, 2013). The NHS is already facing enormous increases in expenditure as the population ages. Therefore, focus will inevitably need to move away from treating preventable illnesses, many of which are caused by physical inactivity, towards servicing this demographic change.

One of the ways of reducing much of this health and cost burden is by encouraging more and more people to cycle. Over the next few pages, this report demonstrates research that shows many people have joined the cycle to work scheme for health reasons. Importantly, it also shows how the scheme is an effective agent for promoting cycling uptake and can play a vital role in reducing the cost pressures facing the NHS.



Improving employee health



89%

say keeping fit was important in their decision to join the scheme



85%

have noticed health improvements since joining



97%

of employers say it is important for encouraging a healthy workforce

The cycle to work scheme is one of the few employee benefits that deals directly with workforce health.

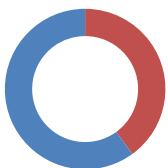
By encouraging workers to commute to work by bike, in order to make financial savings, the cycle to work scheme has had a profound impact on employee health.

85% of scheme users have noticed health benefits since joining the scheme – including increased fitness, increased lung capacity and reduced stress.

“The scheme means you can exercise both morning and evening during normal commute time without taking extra time out of your day.” 36-45, female

“I have become fitter, more active and more alert during the working day.” 45-54, male

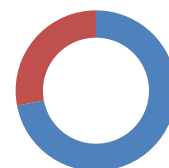
Changing behaviours



40% of scheme users who considered themselves novice or occasional cyclists now consider themselves enthusiastic



54% of participants did not cycle to work before signing up to the scheme



72% said they would not have bought their bike if it had not been available through the scheme

The cycle to work scheme is a proven agent for behavioural change. By providing an incentive to start cycling to work, the scheme has increased cycling up-take, and therefore levels of physical activity.

For 72% of participants, the scheme has been integral in their decision to buy a bike. More importantly, for 54% of users, cycling to work has only become a reality after joining the scheme. With over 164,000 new scheme users in 2013 alone, that is equivalent to over 88,500 new cyclists commuting to work over the past 12 months. This behavioural change is key in meeting public health objectives.

Helping the NHS

509 deaths prevented
per year by the cycle to work
scheme

Analysis using the World Health Organisation’s Heat Tool demonstrates the vast impact that the scheme has on public health outcomes. Using industry figures*, the analysis shows that the scheme prevents 509 deaths per year by encouraging people to start commuting to work by bike.

£5.1bn savings in
Government expenditure
over a 10 year period as a
result of health benefits that
accrue from scheme usage.

The same analysis paints an even starker picture of the value of the scheme in generating savings in government expenditure. By encouraging a more active lifestyle, the scheme helps reduce the cost caused by preventative, non-communicable diseases, easing pressures on public finances.

Healthier commute, healthier life

Participants in the cycle to work scheme have noted a vast number of improved health outcomes since joining up to the scheme. These include:

- Increased fitness levels;
- Increased lung capacity; and
- Reduced stress levels.

Below provides an indication of the key benefits that scheme participants have noticed since they started commuting to work by bike. Increased fitness is the prevailing health benefit noticed by scheme users, and one that has long term advantages for the participant.



Recommendations

1. Given the devolution of public health responsibilities to local authorities, it is imperative that the Government ensures relevant bodies at a local level are fully aware of the cost-effective measures available to them to meet their objectives. The cycle to work scheme is one such example of this. Active dissemination of the benefits of the scheme from central Government to local authorities and local businesses will help achieve this.
2. There should be continued promotion of the scheme by the Government to ensure that its benefits, particularly as an agent of behavioural change, can have the most impact across the whole population. This will ensure that the effect the scheme has on improving people's health will be felt as widely as possible.
3. With local authorities taking greater responsibility for the implementation of sustainable transport and public health programmes, there is real opportunity for policymakers to achieve a real integration across these policy areas at a local level. Cycling, and the promotion of the cycle to work scheme, sits at the heart of this integration. Ensuring greater joint working between those tasked with delivering public health outcomes and those tasked with achieving sustainable transport objectives can maximise the benefit to a local community. Cycling has the potential to catalyse this joint working.

4. The financial savings users of the cycle to work scheme make on the cost of their bike are the key motivation for signing up to the scheme. It encourages people to commute to work by bike, improving public health outcomes. These financial benefits must be maintained to ensure the cycle to work scheme continues to be viewed as a positive agent for behavioural change.

About the Alliance

The Cycle to Work Alliance is a group of leading providers of the cycle to work scheme, comprising Cyclescheme, Cycle Solutions, Evans Cycles and Halfords.

The members of the Alliance work together to highlight the public policy benefits – to public health, sustainable transport and employee engagement – that the cycle to work scheme provides. Delivering improvement on these issues is a vital target of both central Government and local authorities and the Alliance works to ensure that the cycle to work scheme continues to play a central role in helping policymakers achieve their ambitions.

Want to find out more?

Visit our website

www.cycletoworkalliance.org.uk

Email us

info@cycletoworkalliance.org.uk

Call us

0207 222 9500

List of references

Andersen et al, 2000 All-cause mortality associated with physical activity during leisure time, work, sports, and cycling to work; Archives of Internal Medicine Jun 12;160(11):1621-8

Association of Directors of Public Health, 2010 Take action on active travel

Centre for Workforce Intelligence, 2013 A strategic review of the future healthcare workforce

Department of Culture, Arts and Leisure, 2013 Experience of sport and physical activity by adults in Northern Ireland

Department of Health, 2010 On the state of public health: Annual report of the Chief Medical Officer 2009

Department of Health, 2011 Start active, stay active: A report on physical activity for health from the four home countries' Chief Medical Officers

Department of Health, 2013 Reducing obesity and improving diet

Government Office for Science, 2007 Foresight Tackling Obesities: Future Choices

Jarrett et al, 2012 Effect of increasing active travel in urban England and Wales on costs to the National Health Service; The Lancet 379 (9382)

National Institute for Health and Clinical Excellence, 2008 Promoting and creating built or natural environments that encourage and support physical activity

National Institute for Health and Clinical Excellence, 2012 Walking and cycling: local measures to promote walking and cycling as forms of travel or recreation

National Institute for Health and Clinical Excellence, 2012

<http://www.nice.org.uk/newsroom/pressreleases/NoTimeForPhysicalActivityTheAnswersOnYourdoorstepSaysNICE.jsp>

National Institute for Health and Clinical Excellence, 2013 Physical activity: brief advice for adults in primary care

Public Health England, 2012 Active People Survey

PWC, 2011 http://pwc.blogs.com/press_room/2011/04/absenteeism-costing-uk-business-32-billion-a-year-with-workers-taking-almost-double-the-number-of-si.html

List of references continued

Scottish Government, 202 Physical activity national indicator

Sustrans, 2013, Physical activity and health – facts and figures

Stationery Office, 2004 House of Commons Health Committee, Obesity, Third Report of Session 2003-04

Welsh Government, 2012 Welsh Health Survey

Appendix

The following calculations were used to determine the average distance travelled weekly by cycle to work scheme users. The resulting figures were used for the WHO Heat Tool analysis.

- From our data set, we determined that the average user cycles to work 3 days a week with an average daily return distance of 9.97m. This works out at approximately 30 miles a week cycled per scheme user.
- Figures from internal Cycle to Work Alliance market data analysis highlights that 440,754 individuals have participated in the scheme, and subsequently bought their bike, over the past three years.
- These figures are then inputted into the WHO HEAT Tool.