

The role of active travel in improving mental health

Part 1: How active travel can improve health and wellbeing in the workforce

Active Travel Toolkit Slide Pack

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The Role of Active Travel in Improving Mental Health Toolkit Part 1: How active travel can improve health and wellbeing in the workforce. Part of the Active Travel Toolbox, written by Sustrans with support from Dr Adrian Davis, Living Streets and The TAS Partnership Limited. Sustrans is a registered charity no. 326550 (England and Wales) SCO39263 (Scotland).

What is this slide pack for?

This slide pack provides a summary of the toolkit: How active travel can improve health and wellbeing in the workforce.

The Active Travel Toolbox slide packs are designed to demonstrate the benefits of sustainable transport and help LEPs and local delivery partners strategically invest in walking and cycling schemes.

This slide pack includes:

- Key messages
- Statistics and evidence
- Signposting to tools and case studies

Contents

This slide pack covers:

- The benefits of regular physical activity for health
- The health costs of physical inactivity for society and employers
- How transport relates to physical activity
- Determining the health benefits of walking and cycling

Key messages

- Physical activity is associated with many improvements in health and wellbeing, including lower death rates, and lower risk of heart problems and depression.
- The economic costs of absence and presenteeism (working whilst sick) to business, the economy and the employee are also significant.
- Active travel has great potential to incorporate physical activity into our day to day lives to meet governmental guidelines. This could lead to significant improvements in health whilst reducing economic costs for businesses and society.

“The potential benefits of physical activity to health are huge. If a medication existed which had a similar effect, it would be regarded as a ‘wonder drug’ or ‘miracle cure’.

Former Chief Medical Officer

The benefits of regular physical activity for health

Physical activity is associated with many improvements in health and wellbeing.

It benefits people of all ages, ranging from helping children maintain a healthy weight to reducing conditions such as hip fractures in older generations.

Despite the proven benefits from physical activity over time many western societies have been gradually adopting more physically inactive lifestyles.

The UK guidelines for physical activity for adults (aged 19 to 64 years) are as follows:

“Adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes of moderate intensity activity in bouts of 10 minutes or more.”

In England in 2012 only 67% of men and 55% of women met physical activity recommendations.

Health topic	Evidence of the effect of physical activity
Overall death rate	Approx. 30% risk reduction between the most and least active
Cardiovascular	20 - 35% lower risk of cardiovascular disease, coronary heart disease and stroke
Metabolic	30 - 40% lower risk of type 2 diabetes in at least moderately active people compared with those who are sedentary
Musculo-skeletal health	36% to 68% risk reduction of hip fracture at the highest level of physical activity
Falls	Older adults who participate in regular physical activity have an approximately 30% lower risk of falls
Cancer	Approximately 30% lower risk of colon cancer and 20% lower risk of breast cancer for adults participating in daily physical activity

Dept. of Health, 2011: Summary of the relationship between physical activity and health

The health costs of physical inactivity for society and employers

Costs for the health sector

The cost of ill-health and unhealthy lifestyles is significant and increasing across the UK.

A feasible increase in physical activity could lead to major cost savings for the nation for lifestyle related diseases, both for the health sector and for employers.

Lifestyle diseases cost society significantly, for example coronary heart disease alone costs us £4bn a year (HSCIC, 2015).

Costs for employers and in the workplace

Absence is a major cost to business at £14bn per annum (Confederation of British Industry 2013). At least one third of absenteeism costs, i.e. around £5bn, are attributable to physical inactivity.

Furthermore presenteeism, i.e. working whilst sick is likely to cost businesses even more.

Minor illnesses, such as colds and flu are identified by employers as the most common causes of short-term absence. These are associated with low immune function. Physical fitness and physical activity through walking and cycling are strongly linked with boosting immune response.

Costs for academic attainment

In addition, physical activity is well documented as contributing to better academic attainment.

Public Health England (2014) notes that “children and young people who are aerobically fit have higher academic scores”.

The rationale is that improved oxygenated blood flow to the brain enhances brain function.

How transport relates to physical activity

One approach with significant potential to increasing physical activity levels is to promote active modes of travel, i.e. walking and cycling.

There is increasing evidence of the link between adult obesity levels and the amount of activity in travel behaviour. For example Western countries with the highest levels of active travel generally also tend to have the lowest obesity rates (Bassett et al 2008).

Evidence suggests that switching to active travel for short motor vehicle trips could save £17bn in NHS costs over a 20 year period. The largest cost savings would be reductions type 2 diabetes with an annual cost to NHS of £9bn (Jarrett et al, 2012).

The Active People Survey has shown that people who cycle for travel purposes are four times as likely to meet physical activity guidelines as those who do not (Sport England, 2015).

For those with a low initial fitness level, cycling just three kilometres, four days each week is enough to improve physical performance (Hendrikson, 1996).

Public transport use also supports physical activity as many public transport users walk or cycle to the bus stop or rail station.

A significant minority of public transport users, often around 25-30%, obtain the minimum recommended 150 minutes of physical activity each week just through using public transport combined with walking (Besser and Dannenberg, 2005)

Determining the health benefits of walking and cycling

The Health Economic Assessment Tool (HEAT) is a tool designed to help conduct an economic assessment of the health benefits of walking and cycling by estimating the value of reduced premature deaths that result from active travel.

It is incorporated within the DfT's Transport Analysis Guidance and its application by local authorities to cycling and walking interventions is now recognised as increasingly valuable in quantifying the benefits of walking and cycling.

As a consequence of only including premature mortality and not illness (morbidity), the tool is conservative in the estimates that it makes. The WHO have suggested that the benefit may be double if reductions in illness were included rather than just reductions in premature deaths.

The tool can be used for a number of different situations, for example:

- when planning a new piece of cycling or walking infrastructure to help to test the case for investment
- to value the reduced deaths from past and/or current levels of cycling or walking, such as a single route, as well as across an authority
- to provide input into more comprehensive economic appraisal exercises (such as large schemes which may impact on walking and cycling levels)

Case studies

The University of Bristol Travel Plan

The University of Bristol Transport Plan was initiated in 2009 to support more sustainable transport of both staff and students by making parking more limited and expensive, whilst simultaneously increasing the attractiveness of alternative modes of transport to the car.

A survey of the impact of the plan between 1998 and 2007 found:

- the percentage of respondents who reported that they usually (four to five times per week) walk to work increased from 19% to 30%
- the percentage of respondents who reported that they usually cycle to work increased from 7% to 12%
- the percentage of respondents who usually commuted by car decreased from 50% to 33%

Conservative estimates suggest approximately 70% of commuters usually cycling or walking were meeting at least 80% of their weekly recommended guidelines of physical activity.

(Brokman and Fox, 2010)



Bristol University: source Creative Commons

Case studies

Reducing absenteeism costs to employers through cycling

To better understand the effect of cycling to work on absenteeism research was undertaken through a questionnaire of three large Dutch organisations that was compared to absenteeism data from the year preceding the survey.

Of the 1,236 employees who took part in the study:

- 64% were regular cyclists and 36% were non-cyclists.
- Regular cyclists had significantly lower rates of absenteeism (on average 7.4 days per year) than non-cyclists (on average 8.7 days per year).

The study also found that the more often an employee cycled and the longer the distance travelled, the lower the rate of absenteeism.

The potential benefits of cycling to work are considerable. If the number of employees cycling regularly to work were to increase by 1%, this would generate an annual cost saving to employers of around £32.5 million per year in the Netherlands.

(Hendrikson et al, 2010)



Cycling in Amsterdam: source Creative Commons