

# NATIONAL CYCLING STRATEGY

## Cycling and Health

### Introduction

Cycling is healthy! Riding a bike – whether for fun, sport or as transport – is a healthy way to get around. And improving health is one of the main things that motivates people to try cycling. Many people have got back on their bikes after not cycling for many years with the aim of getting some fresh air and exercise, and to help control their weight.

This leaflet explores the links between cycling and health. It sets out convincing evidence for the health benefits of cycling and some of the main aspects of government policy – on both health and transport - which support cycling.

Initiatives aimed at increasing levels of cycling can be seen to be at the heart of 'joined-up' policy making. Cycling is as much about public health, the environment, land use, and freedom as it is about transport. Many areas of public policy are now converging to make cycling a more convenient, realistic and safe option for regular travel. These include transport policies to cut congestion and public health policies to promote well being through regular physical activity.

The leaflet is for people who have an interest in enhancing conditions for cycling both within and outside the NHS, and who wish to make the connections between cycling and health.



PHOTO: DEPARTMENT FOR TRANSPORT

The leaflet is produced to support the National Cycling Strategy (NCS). The NCS was launched in July 1996. It aims to establish a culture favourable to the increased use of bicycles for all age groups; to develop sound policies and good practice; and to seek out effective and innovative means of fostering accessibility by bike.

In England, the NCS is overseen by the NCS Board, which has overall responsibility for the recommendation of day-to-day policy, advice and guidance to local authorities and Government Departments.



Faculty of Public Health Medicine

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The National Cycling Strategy aims to increase the use of bicycles for all types of journey. It has a target to quadruple the number of trips made by bicycle by 2012 on 1996 levels

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NATIONAL CYCLING STRATEGY  
[www.nationalcyclingstrategy.org.uk](http://www.nationalcyclingstrategy.org.uk)

March 2003

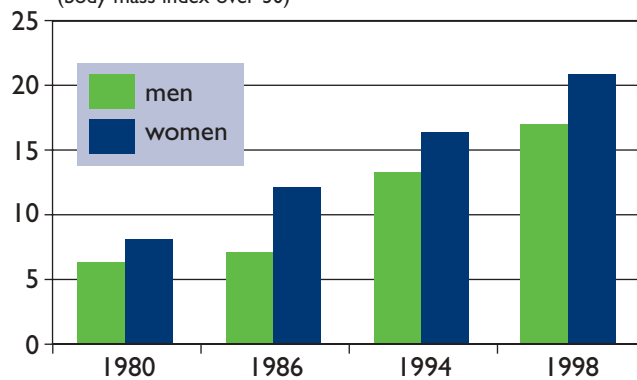


PHOTO: SOUTHEND ON SEA BOROUGH COUNCIL

## Health Benefits

England is a sedentary nation. Around 6 out of ten men and 7 out of ten women are not active enough to benefit their health. Declines in cycling and walking have contributed towards this overall reduction in physical activity – which is having an adverse effect on our health. More sedentary lifestyles, together with changing eating patterns, have led to a tripling of levels of obesity in the last twenty years.

Prevalence of obesity in England  
% of the adult population classed as obese  
(body mass index over 30)



Source: Health Surveys for England 1993-98

Cycling is healthy:  
regular cycling  
contributes to reduced  
risk of heart disease  
and some cancers, and  
helps control weight

Cycling has the potential to be one of the most healthy and accessible forms of physical activity as it can so often be integrated into daily life. Regular cycling – at a level where the cyclist breathes more heavily than usual but is not out of breath – will benefit many aspects of health.

## All cause mortality

Active and fit people live longer. Many studies show that the risk of premature death is lowest among those who are most physically active. The greatest benefit from increasing physical activity is gained by those who are least active to start with.

Daily cycling is sufficient to lead to significant health benefits: one study showed that even after adjustment for other risk factors, including leisure time physical activity, those who did not cycle to work experienced a 39% higher mortality rate than those who did.

## Coronary Heart Disease

Coronary Heart Disease (CHD) is the single most common cause of death in both men and women. One in four men and one in six women die from the disease. Lack of physical activity is one of the most important risk factors for CHD. People who have a physically inactive lifestyle.

It is estimated that 36% of all CHD can be attributed to lack of physical activity such as cycling.

Studies have consistently shown that reducing the risk of CHD can be achieved through relatively low levels of activity, and the benefits can be achieved during middle age by replacing an inactive lifestyle with an active one.



PHOTO: TED LIDDLE

## Stroke

The majority of studies report lower incidence of stroke in association with regular light to moderate activity, as compared with inactivity.

## Diabetes

Type 2 diabetes (sometimes known as 'adult onset diabetes') is the most common metabolic disorder worldwide, and is associated with a number of other illnesses. The incidence of Type 2 diabetes has increased dramatically in recent years, with some cases now being noted in children.

Physical inactivity can increase the risk of developing this condition by up to 50%.

## Cancer

Physical activity is associated with an overall reduced risk of dying from cancer. The strongest evidence exists for cancer of the colon: physical activity has a protective effect on colon cancer with an average risk reduction of 40-50%.

Physical activity appears to be associated with a reduced risk of breast cancer. One recent study found a reduced incidence of breast cancer among women who had cycled regularly in the past.

The *National Service Framework for Coronary Heart Disease* set a target for the development of 'green' transport plans and employee-friendly policies' by April 2002.

The *New Environmental Strategy for the NHS* also sets a target of the NHS having local transport strategies in place by October 2002.

*Sustainable Development in the NHS* includes a section on transport which calls for travel plans.

The Department of Health's *Corporate Governance: Controls Assurance* risk management process includes transport as one of the key criteria and identifies the need for travel plans.

## Cycling Doctors

CASE STUDY

A survey published in the *British Medical Journal* showed that a number of GPs were able to cycle as part of their working lives. 33 regular GP cyclists were identified, from all sorts of practices: singlehanded and multipartner; urban, suburban, and rural. They were all sorts of GPs: full time, part time, partners, or locums. Some GPs cycle every day, some only when they are not on call; others take the car only when they need to transport medical students or take children to school. Some drive to work and keep a bicycle at the practice for visits, or they take a folding bike.

The article concluded:

*"A working lifetime exhorting patients from your comfortable swivel chair to take control of their own health and fitness, while you fail to do so, is unlikely to be satisfying. You'll only be a GP once, so walk the way you talk; or rather, seize life by the handlebars."*



Cycling is great exercise: leisurely cycling (around 10 miles/hour) burns calories at the same rate as very brisk walking (faster than 4mph)

*“There are major opportunities for achieving large health gains for the European population by increasing levels of routine physical activity. Walking and cycling as means of daily transport can be a most effective strategy to achieve these gains.”*

World Health Organization  
Regional Office for Europe (2002)



## Overweight, obesity and associated conditions

More than 50% of adults in the UK are overweight, putting them at increased risk of hypertension, coronary heart disease, Type 2 Diabetes, and osteoarthritis. Obesity is an increasing problem in young people too: the Health Survey for England in 1997 found that 20% of four-year-olds were overweight, and 8% were obese. Regular physical activity such as cycling is an important aspect of weight control. In one UK experiment, body fat was significantly reduced among overweight or obese people who took up cycling.

## Mental health and well being

Physical activity is associated with improved subjective well-being, mood and emotions, and enhanced levels of self esteem.

## How much activity is enough?

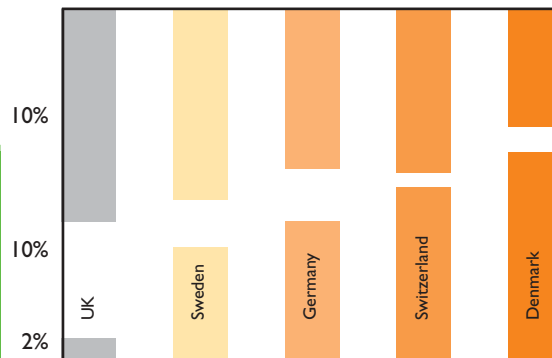
Health experts agree that the days of ‘no pain no gain’ are over. Instead, the focus is on **moderate intensity** physical activity – such as cycling – carried out as part of everyday life.

The recommendation from most health agencies for adults is to build up to taking at least 30 minutes of physical activity on most (preferably all) days of the week. The 30 minutes can be built up over a day, so that two or three bouts of 10 or 15 minutes each provide important health benefits.

So, for an average cyclist that is only two short journeys of about 2-3 miles each way on most days.

## Prevalence of overweight children aged around 10 years

Source: International Obesity Taskforce 2002



## Levels of cycling in selected countries

Reproduced by permission of Sustrans  
Source: DfT 1996

## Building and maintaining healthy bones, muscles and joints

Physical activity helps to build and maintain healthy bones, muscles and joints and hence helps people to stay mobile and live independently. Physical activity has particular positive effects on three main conditions: osteoporosis, osteoarthritis, and low back pain.

## Second-chance cycling

### CASE STUDY

In Stockport PCT, cycling is being offered to patients recovering from a heart attack as part of an innovative approach to cardiac rehabilitation. As well as being given access to gyms and healthwalks, people recovering from a heart attack are being offered weekly bike rides led by an experienced cycle leader. One group of men were so keen on cycling after their course that they formed a new cycling club – the ‘Second Chance Cycling Club’ and continue to ride together every week.

## Other Benefits

The benefits of cycling do not stop at improvements to physical and mental health. Cycling is also beneficial to wider public health through reduced adverse impacts associated with motor traffic. These include:

### Improving air quality

Cycling is a pollution-free, environmentally sustainable mode of transport which makes negligible contributions to congestion.

### Reducing noise pollution

Motorised road transport is a major source of noise in the environment, while cycling is virtually silent. A modal transfer away from car use would help reduce road traffic noise pollution.

### Reducing danger

By lowering motor traffic we can reduce the levels of real and perceived risk for those on foot and travelling by bike. This can allow people to be as mobile as they would like to be, and in particular lets parents allow their children to walk and cycle to school, to play outside, or travel independently.

### Decreasing social exclusion

Lowering levels of motor traffic also prevents people being cut off from essential facilities and services including shops, health facilities, parks and friends and family.

### Reduced costs to society

The Prime Minister's Strategy Unit has put the cost of physical inactivity at around £2bn per year, with around 54,000 lives lost prematurely. A 10% increase in activity would benefit the country by at least £500m per year.

## The risk of cycling

Many people say that the risk of cycling is one of the main barriers to more people getting 'on their bikes'. However, the British Medical Association (BMA) has concluded that the benefits of cycling are likely to outweigh the loss of life as a result of crashes.

In 2000, a total of 125 adults and children were killed in the UK while cycling. By contrast, 125,000 people died in the same year from coronary heart disease (CHD) in the UK, of which around 45,000 deaths were due to lack of activity.

Countries which have seen a modal shift in favour of cycling have noted reductions in casualties as the roads become safer – sometimes termed 'critical mass'. For example, in The Netherlands and Denmark, there have been steady increases in the amount of cycling in recent years, accompanied by lower casualty rates per mile. This has been achieved by adopting comprehensive measures to create better conditions for cycling. The more cyclists that there are, the more motorists are aware of cyclists. Consequently they are better at dealing with them and are more positive in their attitude towards them. Cyclists can also reduce the risks themselves, for example, by taking cycle training courses.

The NCS Board believes that exhortation to people to cycle should be accompanied by the creation of a safer environment in which to cycle, and at the same time the encouragement of safe, responsible and confident behaviour by both cyclists and drivers.

Cyclist deaths compared to deaths attributable to inactivity

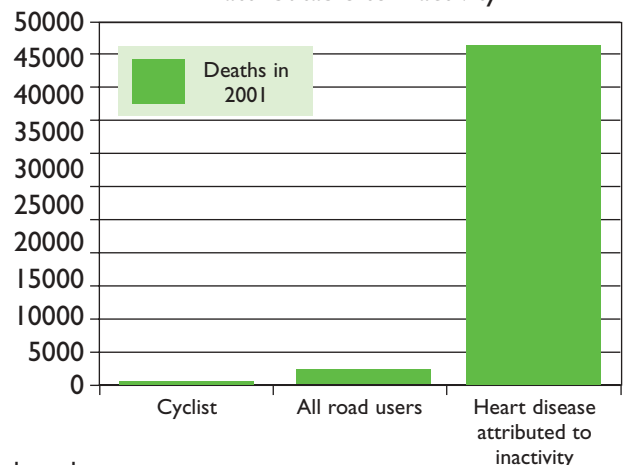


PHOTO: DEPARTMENT FOR TRANSPORT

Cycling is convenient and cheap: keeping fit becomes a part of everyday life – without the cost of gym membership

## Cycling in the new NHS

The NHS has recently undergone an extensive modernisation programme, representing the largest set of organisational changes since it was established in 1948. The wholesale restructuring of the NHS has seen the replacement of health authorities and regional offices by:

28 Strategic Health Authorities, primarily responsible for monitoring and performance management of NHS bodies.

308 Primary Care Trusts (PCTs) - statutory NHS bodies that are responsible for improving the health of the people in their area, tackling health inequalities and bringing health and social care more closely together.

Nine regional government offices, each with a public health team.

Around 275 NHS Acute Trusts, including Hospital Trusts, which provide healthcare direct to patients.

The main NHS organisations of interest to the promoters of cycling will be the new PCTs. By 2004 they will have 75% of the total NHS budget, ensuring that resources meet local needs.

PCTs vary in the size of the population they cover, from around 80,000 people up to around 300,000. In many cases PCTs have a common boundary (either singly or jointly with another PCT) with a local authority boundary.

There is a public health team in every PCT focused on improving health, preventing serious illness and reducing inequalities in the populations they serve. They are responsible for delivering a number of key government policies relevant to cycling.

## National Service Frameworks

The NHS Plan emphasised the importance of National Service Frameworks (NSF) in setting national standards and defining strategies for implementation. Physical activity has been a component of all the NSFs released to date, including those on Diabetes, Older People, and Mental Health and the NHS Cancer Plan. However, the most relevant is the Coronary Heart Disease NSF.

The Health Development Agency has published useful guidance on the preventive aspects of the CHD NSF, which includes action on promoting cycling.



PHOTO: HEALTHSTART

## Cycle promotion to meet physical activity goals

The Physical Activity Adviser for Bristol South and West PCT has been given responsibility to work with NHS sites across Bristol to improve conditions for cycling among staff, whether for the journey to work or during the course of work. This involves close collaboration with Bristol City Council in promoting travel plans at the NHS sites, with the Council analysing travel surveys free of charge. New secure cycle parking has been installed within some buildings, alongside better changing facilities. The PCTs offer interest-free loans for buying a bike, together with a travel allowance of 50p a mile when cycling during the course of work.

## Health Improvement and Modernisation Plans

Health Improvement and Modernisation Plans (HIMPs) consist of a three year plan and a vision for how the local NHS, with its partners, will modernise services to tackle ill health, as well as the root causes of ill health. They are developed in conjunction with partners through Local Strategic Partnerships (LSPs) which includes local highway authorities and provide the framework for links to the community strategy. Each PCT is required to produce a HIMP for their area that will enable the Strategic Health Authority to monitor progress and performance.

There are also a number of area-based initiatives that have been piloting different approaches to health improvement, prevention and tackling inequalities and deprivation. These include the Health Action Zones, Sports Action Zones, New Deal for Communities, Sure Start programmes, and Healthy Living Centres. These can provide opportunities for the promotion of cycling.

## Delivery Plans

These are relatively new plans, announced in the Department of Health guidance Priorities and Planning Framework 2003-2006. This guidance sets out the priorities for the next three years for the NHS and social services. It describes what local organisations and communities need to do to plan for and implement change. There is a requirement for PCTs to produce Delivery Plans, which incorporate all previous targets and indicators, including those of the NSFs.



PHOTO: HEALTHSTART

## Physical activity strategies.

Many PCTs are involved in developing a strategic approach to the promotion of physical activity across their areas. These often involve close collaboration with the local authority – covering issues of leisure and sport as well as transport. Cycling (both for adults and children) can be a key element of these strategies, and PCTs may sign up to targets for increasing both on-road and off-road cycling.

In addition, the NHS should be active in working to reduce car travel to its premises. The NHS is the largest employer in the UK, and as such is a significant generator of work-related traffic. There are a number of key NHS policy documents that call for the development of travel plans in the NHS. Travel plans provide a package of measures designed to change the way many people access health sites. Cycling, walking, travel by public transport and car sharing are all actively encouraged while single car occupancy is discouraged.

Free advice on the development of travel plans is available from **Action Energy** (see Contacts, on page 8).

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Cycling is green:  
the bicycle is the  
most energy  
efficient mode of  
road transport.

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## Ideas for local action on cycling and health

Talk to the main public health staff in your area: the Regional Director of Public Health (DPH) and the DPHs for the Primary Care Trusts. Find out how they have addressed the issue of increasing cycling.

Look at the extent to which cycling is included in the Health Improvement and Modernisation Plan or Delivery Plan for your Primary Care Trust. If these are being drafted, get involved.

Ask local authority officials responsible for reviewing and drafting the local transport plan (LTP) to make effective links to the relevant public health professionals on cycling. Make links between LTP and the HIMP, and the Local Strategic Partnership.

Find out if there are any current or planned physical activity strategies for the area, and assess how they address cycling.

Work with any PCTs or individual GP's surgeries on cycling on prescription. Suggest setting some up as pilots.

Identify NHS sites in the local area and encourage them to develop travel plans prioritising cycling. Tell them about the resources offered by the Action Energy programme, such as free consultancy advice.

Encourage NHS employees to develop bicycle user groups (BUGs). These can offer a valuable forum for support and the sharing of ideas. Help the BUG to get in touch with local cycle pressure groups, local authority, or retailers, and to get involved in cycling promotions such as Bike Week or Bike to Work.

Contact the Road Safety Officer in your local authority who will be able to give you details of cycle training in your area that you can publicise.



PHOTO: TED LIDDLE

## Contacts

**The National Cycling Strategy** website lists all National Cycling Strategy publications, as well as additional links, references and information.  
[www.nationalcyclingstrategy.org.uk](http://www.nationalcyclingstrategy.org.uk)

**TransportEnergy**. Previously the Energy Efficiency Best Practice Programme, Transport Energy offers free advice on the development of travel plans to help organisations overcome transport problems at their site. Contact the helpline on 0845 602 1425  
[www.transportenergy.org.uk/bestpractice](http://www.transportenergy.org.uk/bestpractice)

**Sustrans'** Active Travel unit produces a newsletter which directly addresses travel plan work at NHS sites. e-mail [activetravel@sustrans.org.uk](mailto:activetravel@sustrans.org.uk) to be added to the mailing list or contact Sustrans on 0117 926 8893 or [www.sustrans.org.uk](http://www.sustrans.org.uk)

**CTC** is the national cyclists' organisation. For information and membership details see [www.ctc.org.uk](http://www.ctc.org.uk)

## The National Cycling Strategy

The National Cycling Strategy was launched in July 1996. It aims to establish a culture favourable to the increased use of bicycles for all age groups; to develop sound policies and good practice; and seek out effective and innovative means of fostering accessibility by bike.

The central target is to quadruple the number of cycle trips on 1996 figures by 2012.

As well as setting a central target for cycle trips, the National Cycling Strategy encourages local authorities and others to establish local targets for increased cycle use.

The Strategy can be viewed on the Department for Transport (DfT) website at [www.dft.gov.uk](http://www.dft.gov.uk)

The National Cycling Strategy Secretariat can be contacted at Zone 3/23, Great Minster House, 76 Marsham Street, London SW1P 4DR  
Tel: 020 7944 2977

The **Health Development Agency** identifies the evidence of what works to improve people's health and reduce health inequalities.  
[www.hda-online.org.uk](http://www.hda-online.org.uk)

**The Royal Society for the Prevention of Accidents** has advice on helping cyclists to improve their safety - [www.rosopa.co.uk](http://www.rosopa.co.uk)