

Cycle facts to arm and protect

DEATHS AND INJURIES

- 136 deaths in 2007 (Latest figures available) – UK (129 in England) –2,458 serious injuries in 2007 in the UK – *source- National Office of Statistics*
- 2,003 cyclists have lost their lives on the roads since 1994. That's an average of 143 per year and means a cyclist dies on UK roads every two and a half days 38,643 seriously injured in the same period - *source- National Office of Statistics*
- 13 of a total of 121 children killed in road accidents in 2007 were pedal cyclists – *source – Department of Transport*
- Most pedal cycle admissions are the result of injuries to the arms/shoulders or the head/face - *source – Department of Transport*

Time:

- Most casualties (81%) occur during the week, in the summer and during the day – *Source – Department of Transport*

In 14 European Union countries including the UK:

- Low fatality rates for bicyclists are found on Sundays
- The number of fatalities per hour is highest during the day - *source – European Road Safety Observatory*
- The number of cyclist fatalities per month is highest between May and October – *source – European Road Safety Observatory*

Age:

- Around 10 % of them are children going to School. In total, 11 per cent of casualties on journeys to school were pedal cyclists – 478 out of 4,411. The majority (77 per cent) of these were boys aged 11-16. The National Travel Survey records that around 1 per cent of primary school and 3 per cent of secondary school children cycle to school. – *Source Department of Transport*

- In 2005 throughout 14 European Union countries including the UK, 44% of the total bicycle fatalities (859 people) were riders older than 60. In Finland and Sweden more than 60% of bicycle fatalities were over 60 years old – *source – European Road Safety Observatory*

Circumstances:

- Most accidents involving pedal cycles involve two vehicles (the pedal cycle and one other) – 94 per cent - Stats for 2007 - *source Department of Transport*
- 81 per cent of pedal cycle accidents involve a pedal cycle and a car. Such accidents account for 73 per cent of killed and seriously injured pedal cyclists, and 82 per cent of all pedal cyclist casualties - Stats for 2007 - *source Department of Transport*
- Accidents between a pedal cycle and HGV were more likely to result in serious injury with 10 per cent of pedal cyclist casualties in these accidents being fatalities, compared with 1 per cent of all pedal cyclist casualties. Nearly 1 in 4 pedal cyclists killed was in an accident with an HGV - Stats for 2007 - *source Department of Transport*
- 5 per cent of pedal cycles involved in accidents were recorded as being on the footway, and a further 3 per cent on a cycle lane or cycleway - Stats for 2007 - *source Department of Transport*
- Throughout 18 European Union countries including the UK, cyclists have the highest proportion of fatalities at junctions: more than a third. In Denmark, the Netherlands and the United Kingdom more than half of cyclist fatalities die at junctions. – *source – European Road Safety Observatory*

Hit & Run

- Nearly 1 in every 6 pedal cyclist casualties (16 per cent) in the UK occurs in a ‘hit and run’ accident – a total of 2,665 in 2007 of which 337 were seriously injured and 16 killed. Pedal cyclists are over-represented in these accidents, representing 11 per cent of hit and run casualties (compared with 7 per cent of all casualties) – *Source - Department of Transport*

Majority of deaths and injured are male:

- The majority of cyclists killed or injured in UK road accidents are male – men accounted for 80 per cent of all pedal cyclist casualties, 82 per cent of KSIs and 82 per cent of fatalities in 2007 (for all road users, the equivalent figures are 58, 70 and 75 per cent respectively). To some extent this reflects the fact that males account for most distance cycled – on average males cycle around 100 km per year and females 27 km. – *source – Department of Transport*

Geography:

- 18 per cent of UK pedal cycle KSI casualties in 2007 were in the London region, and over a third (34 per cent) in London and the South East combined. – *source – Department of Transport*

Pedestrians fare far worse:

- 10,935 pedestrians have lost their lives since 1994
- 122,053 have been seriously injured in the same period - *source- National Office of Statistics*

ENVIRONMENT

- A cyclist consumes 1/50th of the oxygen of a car making the same journey – Times online
- A cyclist can travel 1,037km (644 miles) on the energy equivalent of one litre of petrol – Times online

HEALTH

A cyclist will have greater protection against:

- Heart failure. Exercise provides the single most effective protective factor for coronary heart disease.

- Strokes. Cycling helps to reduce high blood pressure, a condition which significantly increases the chance of someone having a stroke.
- Falls, fractures and injuries. A cyclist has a reduced chance of an accident because of improvements in strength and co-ordination.
- Dangers of pollution. Cyclists and pedestrians absorb lower levels of pollutants from traffic fumes than other road users.
- Cancer and diabetes. Research indicates exercise reduces the risk of developing colon cancer and can also protect against diabetes.

Source – London cycling campaign

- In 1949, 34 per cent of all mechanised journeys were made by bicycle. Fifty years later that figure had fallen to 2 per cent – *Source – Times online*
- Britain has one of the lowest rates of cycling in the EU, with only 2% of all journeys made by bike. The Netherlands comes first, with a rate of 27% -
- Over a period of ten years, the number of cycle paths increased from 9,300km (5778 miles) to a staggering 16,100km (9,941 miles), an incredible 73% increase - *Source – Department for Transport – ‘a sustainable future for cycling’*

POLLUTION

- Noise from road traffic affects 30% of people in the UK. - *Source – Environmental Protection Agency*
- Air pollution. Currently estimated to reduce the life expectancy in the UK by 7–8 months with estimated equivalent health costs of up to £20 billion each year – *Source – Department for Transport – ‘a sustainable future for cycling’*
- Road transport accounts for 22% of total UK emissions of carbon dioxide (CO₂) – the major contributor to climate change. – *Source – Environmental Protection Agency*
- Vehicles tend to emit more pollution during the first few miles of journey when their engines are warming up – *source – Environmental Protection Agency*

- Two thirds of journeys between one and three miles long, and three-quarters of journeys between three and five miles long, are made by car – *Source – Friends of the Earth publication 'Curbing Shorter Car Journeys: prioritising the alternatives'*
- The emissions from car exhausts are responsible for more deaths than road accidents – *source - World Health Organisation (WHO)*

Potentially dangerous vehicle emissions include:

- **Carbon monoxide** – (CO) poisoning is similar to suffocation. CO binds to the haemoglobin contained in red blood cells 200 times more effectively than oxygen, and so can dramatically reduce the ability of the cells to transport and release oxygen to the tissues of the body.
- **Nitrogen dioxide** - and small particulate matter interact with the immune system and may cause changes, ranging from overactive immune responses to immunosuppression.
- **Sulphur dioxide** - pollution is one of the main pollutants that cause acid rain, when it combines with water in the atmosphere to form sulphuric acid
- **Benzene** - Has a suppressive effect on bone marrow and impairs the development of red blood cells. Long-term exposure to Benzene has been shown to be linked to leukaemia.
- **Formaldehyde** - Excessive exposure to formaldehyde may affect the eye, lung, skin and throat, and may cause cancer
- **Polycyclic hydrocarbons** - Are also thought to be carcinogenic. Several of these compounds have caused tumours in laboratory

animals when they ate them, when they were applied to their skin, or when they breathed them in the air for long periods of time.

- **Lead** - interferes with the normal formation of red blood cells by inhibiting important enzymes, it also damages red blood cell membranes and interferes with cell metabolism in a way that shortens the survival of each individual cell.
- Researchers estimate that one in every 50 heart attacks in London are triggered by air pollution – *source – BBC news*

INFRASTRUCTURE

- Over a period of ten years beginning in the 1970's, the Netherlands increased the number of cycle paths from 9,300km (5778 miles) to 16,100km (9,941 miles), a 73% increase – *source – Dutch cycle union Fietsersbond*
- In 1976, the Dutch Government aware of the ill effects of congestion, oil dependence and pollution, provided 80 per cent of construction costs for city bicycle facilities and 50 per cent of construction costs for bicycle facilities along secondary and minor roads. *Source – Dutch Ministry of Transport, Public works and Water Management 1991*
- The UK network has predominantly been put together by a charity – *Source - Sustrans*
- Sustrans were awarded £50 million from the national lottery voted for by the public to invest in new walking and cycling routes, and building bridges over rivers, railways and busy roads – *Source - Sustrans*
- The Government has invested £140 million into Cycling England's budget –

- The Government has built Thirty-Five major road schemes since 2001 - *Source Letter from PM to Douglas Alexander*”, 10 May 2006,
- Cost of expanding the M25 - £5 Billion – source – George Monbiot – Guardian -

ECONOMICS

Petrol = Through the roof
Trains = Most expensive in Europe
A single underground ticket = £4
A single bus ticket = £2
A cycle journey = £0