

A child helmet law would:

- be **disproportionate** to the risk of head injury when cycling.
- **reduce cycling** much more than it would increase helmet use.
- **threaten** the lives and well-being of thousands of children by discouraging a healthy activity.
- **aggravate** efforts to encourage more people to lead active lifestyles.
- represent **poor value for money**. The laws in Australia and New Zealand failed subsequent cost-benefit analyses^{5,32}.

The cycling organisations are not 'anti-helmet', and would encourage people to wear one if they would be more likely to cycle. However, cycling is a safe and healthy activity that is much more likely to extend lives than to shorten them. Cyclists have not been found to be more vulnerable to head injury than the population at large.

Examination of a wide range of evidence has not shown helmet wearing to be associated with a real-life reduction in the rate or severity of cyclists' injuries. Indeed, there are cases where the opposite appears to have happened. Whilst there is so much contradictory evidence, people should be free to choose whether wearing a helmet is appropriate for them and their younger children.

FOR MORE INFORMATION

www.cyclehelmets.org, an international site supported by doctors, cycling safety experts, statisticians and people with professional involvement in helmet design and performance.

Telephone enquiries: CTC Helpline, 0870 873 0060. Press Office 0870 873 0063.



7 REASONS TO OPPOSE A CHILD HELMET LAW

1. The principal threats to children's lives are obesity, heart disease and other illnesses resulting in large part from inactivity. Cycling has a key role to play in preventing these illnesses. Less cycling through a helmet law would aggravate the situation. [PAGE 2](#)
2. Cycling is a healthy activity, and the likelihood of serious head injury is widely exaggerated. [PAGE 3](#)
3. Cycling becomes safer the more people do it. Encouraging cycling is by far the most effective way of reducing risk of injury. [PAGE 4](#)
4. Helmet promotion deters cycling and leads to poorer health. [PAGE 5](#)
5. The benefits of helmets are greatly over-stated. [PAGE 6](#)
6. Many other everyday activities could benefit more from helmet-wearing than cycling. [PAGE 7](#)
7. A helmet law would make it a crime for children to take part in a health giving activity. [PAGE 7](#)

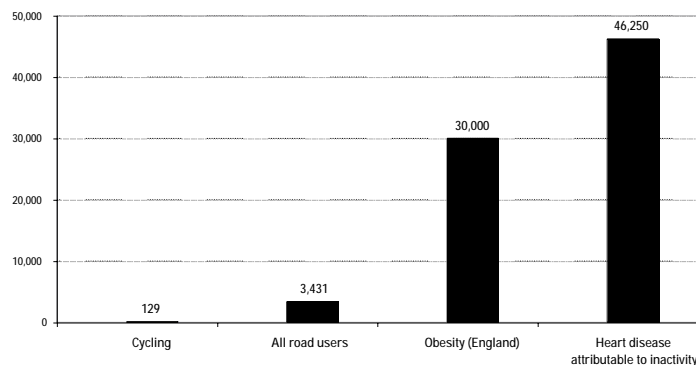
MISLEADING CLAIMS ABOUT HELMETS
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Principal threats to child health and life expectancy

- 16% of 6 to 15 year old children were obese in 2001 – up from 5% in 1990 ¹. This amounts to over 1.2 million children ².
- 9% of 2 to 4 year old children were already obese in 1998 – up from 5% in 1989 ¹. This amounts to over 300,000 children ².
- Predictions suggest that 1/5th of boys and 1/3rd of girls (3 million children) will be obese by the year 2020 ¹.
- Being overweight restricts body activity, damages health and shortens life; and it harms self-esteem and social life. Heart disease, stroke, joint problems and the commonest form of diabetes (Type 2) are direct effects of obesity and overweight. People of every age, every region and from all population groups are affected. Overweight and obesity also result in a huge financial burden for government, the NHS and society as a whole – the National Audit Office estimates costs to the NHS of at least £0.5 billion a year, and £2 billion to the wider economy. Doctors and public health specialists are so concerned about the medical problems being stored up by overweight and obese people that they are pressing Government to encourage fundamental life-style changes ¹.
- Obesity shortens lives by an average of 9 years ⁷.
- 157,000 people die of heart disease each year, over one-third due to inactivity ⁸. Children as young as six now have the early signs of heart disease ⁴.

Cycling deaths in 2002 versus annual deaths due to inactivity



Cycling is a safe and healthy activity

- Cycling gives a level of fitness equivalent to being 10 years younger ⁴⁸ and a life expectancy 2 years above the average ⁴⁹. The health benefits of cycling far outweigh any risks involved ¹¹, by a factor of around 20:1 according to one estimate ¹².
- People who cycle regularly live longer than non-cyclists, with a 29% lower mortality rate and better health throughout their lives. Indeed, cycling regularly to work (and, by extension, to school) has been shown to be the most effective thing an individual can do to improve health and increase longevity ¹⁵.

... and the risks of cycling are low

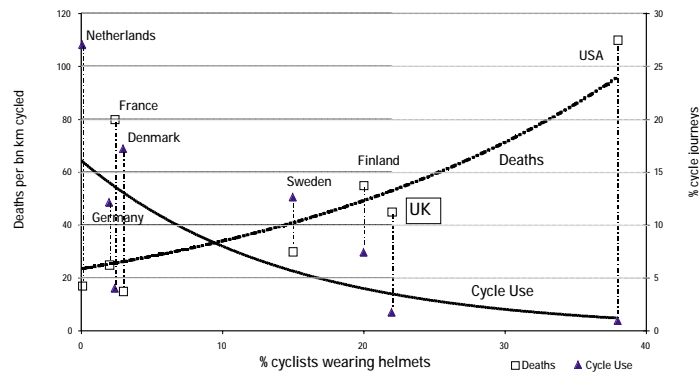
- It takes over 3,000 years of on-road cycling to suffer a serious head injury, let alone one that might be mitigated by a cycle helmet ¹³.
- Child cycling accidents account for only 7.1% of all child head injury admissions, and 2.4% of all child hospital admissions ⁹.
- As half of all children have bicycles, this puts risk when cycling into perspective. Cycling accidents are hardly more likely to result in head injury than the generality of child accidents. Even in collisions with vehicles, children suffer over 4 times as many head injuries as pedestrians than when cycling ⁹.
- In 2002, there were 2,183 child cyclist admissions with head injuries in England. 400 - 500 of these might be categorised as serious (i.e. fractures and intra-cranial injuries). However, it is unclear how many of these might be mitigated by a helmet, no matter how effective it might be ⁹.
- Child cyclist head injury rates are already falling at a rate that cannot be accounted for by helmet use. For example, they are falling in road crashes where TRL surveys indicate helmet use has decreased for those most at risk.

The number of children currently at risk of dying prematurely through obesity and related illnesses is approximately 12,000 times the number suffering serious head injury each year through cycling and which might be mitigated by a helmet that was 100% effective. That ratio is predicted to double by the year 2020 ¹.

Cycling gets safer the more people do it

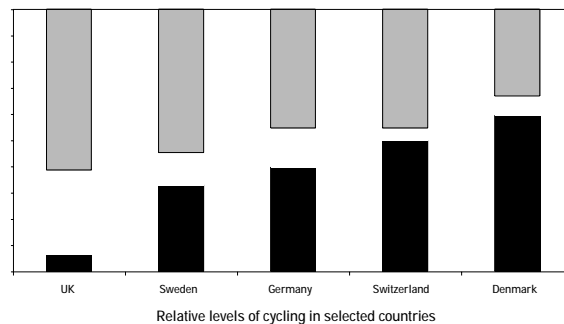
- The most effective way to reduce the likelihood of any kind of injury when cycling is to increase the number of people who cycle. When cycle use doubles, the risk of injury per cyclist falls by 35% to 40%^{16 17 18}.
- An international comparison shows that in those countries where cycle use is high, cycling is much safer yet very few people wear helmets¹⁹:

EU & US: Helmet wearing versus cycling safety and use



- Moreover, the countries with highest cycle use (and low helmet wearing) also have the lowest levels of childhood obesity²⁰:

Prevalence of overweight children aged around 10 years



Any measure that discourages cycling will have a profound effect on average life expectancy, the likelihood of ill-health and the consequences of a sedentary lifestyle.

Helmets deter cycling and lead to worse health

- Helmet promotion is strongly linked to a decrease in cycle use²¹, and helmet laws all the more so. Teenagers are the group most likely to be put off cycling.
- Helmet laws in Australia resulted in large decreases in the number of people cycling. Child cycling fell by 30% to 50%²². Cycling by secondary school children in Sydney was almost destroyed, falling by 91%³.
- A before-law survey showed that 272 out of 1,293 teenagers in Victoria (Australia) wore helmets. After the law, 302 wore helmets out of 670 teenage cyclists counted under comparable conditions²³.

The law resulted in 30 more teenagers wearing helmets compared with 623 fewer cycling.

- In Nova Scotia, Canada, cycle use fell by 40% to 60% following the introduction of a helmet law, with the largest decrease among teenagers²⁴.
- In New Zealand, cycling decreased by approx 22% from the introduction of its helmet law in 1994 to 1997 (and has not recovered since)²⁵.
- In Sweden, non-head injuries fell by 48% in helmet promotion areas compared with 32% elsewhere. The most plausible explanation is a substantial fall in cycle use²⁶.
- In Britain, the fall in cycle use since 1991 has been almost twice the increase in helmet use²⁷.

Senior neurosurgeons, cycling and helmet experts have consistently given evidence in British courts that cycle helmets have very limited value in cases of serious head injury.

See:

www.cyclehelmets.org/mainframes.html#1054.html for the experience of one solicitor and the opinion of an eminent neurosurgeon.

www.cyclehelmets.org/mainframes.html#1081.html for the opinion of the UK's leading helmet test expert and other professionals in court.

The benefits of helmets in reducing injury are greatly overstated

- There is no large-population evidence from anywhere in the world that cycle helmets have been effective in reducing fatal or serious injuries. In Britain, the Government says that it knows of no data linking increases in helmet use with improvements in cycling safety ⁴⁷.
- Cyclists in the USA were 40% more likely to suffer head injury in 2001 than in 1991, although helmet use had increased from 18% to 50% ²⁸.
- In Greater London, cyclist injuries became more serious as helmet use increased in the mid 1990s. In 2001, although some 50% of cyclists wore helmets, the severity of injuries was higher than in 1981 and fatalities were at their highest since 1989. The severity of pedestrian injuries (which previously had tracked those of cyclists) continued to decline ²⁹.
- In Great Britain, the rise in helmet use has not been matched by any detectable improvement in trends for fatalities or serious injuries ⁶.
- In Nova Scotia, a law increased helmet use from 36% to 86%, but the fall in head injuries was only in line with the drop in cycle use ²⁴. In Canada as a whole, rising helmet use (to 50% by 1997) has had no detectable impact on cyclist fatalities ³¹.
- In Western Australia, helmet laws caused head injuries to fall by 11 to 21%. But cycle use fell by 30% or more. The risk of head injury for those who continued to cycle increased ³².
- In New Zealand, large increases in helmet use have not brought about any reduction in the proportion of serious head injuries. Some reduction in mild concussions and lacerations has been balanced by an increase in potentially more serious neck injuries ³³.

Many doctors believe that cycle helmets can increase the risk of the most serious types of brain injury (that lead to death or chronic intellectual disablement) by converting direct forces into rotational ones that helmets do not mitigate ¹⁰.

Many other everyday activities would benefit more from helmet-wearing than cycling

- Children are much more likely to suffer head injury as pedestrians, or through jumping or falling ³⁴, than when cycling.
- 6 times more pedestrians and 18 times more motor vehicle occupants suffer lethal head injuries than cyclists ³⁶.
- Helmets for car occupants, including children, are more effective than those for cyclists and have greater potential for reducing injury ³⁷.

A helmet law would make it a crime for children to take part in a healthy activity

- It would be perverse to prosecute children or their parents for cycling, which is beneficial to health, whilst encouraging through the same helmet law sedentary lifestyles, which lead to worse health and greater costs for society.
- In Australia, the courts rapidly became overloaded with the prosecution of those who had not paid their fines. The Victorian Children's Court pleaded to the police to reduce the number of helmet fines being issued ³⁸. On other occasions children faced detention for up to 3 months, tearing families apart ³⁹.

MISLEADING CLAIMS

The following claims have been made to press for a helmet law. It is important to be sure of the facts, especially when claims are emotional or alarmist by nature.

Claim: "Cycle helmets prevent 85% of head injuries and 88% of brain injuries"

Fact: This claim originates from only one source ⁴⁰, and has never been approached by real-world evidence anywhere. In places where helmet use has become significant, there has been no detectable reduction in head injuries relative to cycle use. The research on which the prediction was made has been widely criticised (e.g. ⁴¹) for comparing two quite different groups of cyclists. The substitution of more robust data, collected at the same time as the original research, leads to the conclusion that helmets make no significant difference. Detailed discussion at: www.cyclehelmets.org/mainframes.html#1068.html

MISLEADING CLAIMS

Claim: "Cycle helmets could prevent 90% of fatalities"

Fact: This prediction also comes from a single source ⁴² and is not reflected by real-world experience. Fatality trends in countries where helmet use has become significant give no reason to believe that helmets have saved even a single life. In 1985 Dr Dorsch, the report's principal author, told an Australian parliamentary committee that the conclusions of the study should be treated with care. She said, "That was a hypothetical procedure based largely on an adult group of cyclists".

Claim: "I know someone whose helmet saved his life"

Fact: Many helmet wearers experience crash situations that lead them to believe that their helmet 'saved their life'. But across cyclists as a whole there is no evidence that helmets protect from death or serious injury. Such claims give support to evidence that helmeted cyclists are more likely to hit their heads if they crash and that they may be more likely to crash in the first place. See www.cyclehelmets.org/mainframes.html#1019.html for a fuller discussion.

Claim: "One child under the age of 16 dies every week in the UK of head injuries"

Fact: From 2000 to 2002 the average number of child cyclists killed due to head injuries in England was 12 per annum ⁴³. Pro-rata population, this would be fewer than 15 for the UK – very much less than the 52 suggested.

Claim: "... and a further 60 are admitted to Accident and Emergency departments with serious head injuries"

Fact: In 2002, the number of serious child cycling head injuries admitted to A&E departments in England was 400 to 500 (according to definition) ⁹, or around 550 for the UK pro-rata population. This equates to an average of 10 per week.

Claim: "Over 70% of child cyclist deaths involve head injury"

Fact: Over 70% of all impact deaths involve head injury. In fact, 82% of cyclists and 86% of pedestrians and motor vehicle occupants who die in crashes suffer lethal head injuries. 71% of cyclists die primarily from head injuries, more than the other groups. However, this is not because cycling fatalities are more likely to involve head injury (they are not), but because they are less likely to involve lethal injuries to the thorax and abdomen ³⁶.

MISLEADING CLAIMS

Claim: "30 per cent of children's head injuries admitted to hospital are due to cycle injuries"

Fact: In 2002, cycling was implicated in only 7.1% of all child head injury admissions in England ⁹. In Australia, pre-law, the proportion was 8% ⁴⁴.

Claim: "Over 100,000 people under 16 are treated in hospital each year due to a cycle accident. And 60% of those injured sustain an injury to their head/face"

Fact: In 2002, there were 5,804 child hospital admissions in England (6,965 pro-rata for UK) associated with cycling, of which 2,183 (2,620 UK) involved head injury ⁹. Of these, the proportion due primarily to head injuries, 37.6%, is lower than for child pedestrians (43.7%) and only a little above the average for all child injury admissions (34.2%).

Claim: "In real terms [helmet compulsion] equates to 20,000 young people being spared such tragedies each year. The savings in healthcare costs alone would approximate to £2,000,000,000 annually"

Fact: In England in 2002 there were 400 to 500 serious head injuries to child cyclists and 10 deaths ^{9,43}. Pro-rata, the total number of such 'tragedies' in the UK was approx 550. It is unclear how many of these would be mitigated by a helmet even if 100% effective. Moreover some casualties involved multiple serious injuries and an unknown number of the head-injured children had been wearing helmets at the time.

There is no real-world evidence that cycle helmets are effective in preventing serious or fatal injuries. However if they were, the total costs saved in preventing (say) 12 fatalities and 300 serious injuries would be around £48m ³⁵, not £2,000m.

Claim: "In Australia, teenage cycle use fell because the helmet law was introduced at the same time as the driving age was lowered"

Fact: The driving age was lowered, from 18 to 17, in only one Australian state, Victoria, where 17 year olds accounted for 6% of cycle traffic ³⁰. Even if every cycling 17-year old had changed over completely from cycling to driving, that would account for only a small part of the 43% drop in cycling by Victorian teenagers that followed the law. Nor would it account at all for the decline of up to 60% in cycling amongst teenagers seen in other Australian states.

MISLEADING CLAIMS

Claim: "Cycle use has recovered in Australia"

Fact: In some parts of Australia the number of people cycling has returned to similar levels to that experienced pre-law. However, there has been the loss of more than a decade of cycling growth (cycling levels were generally increasing before the law), and in many places part of the new increase is due to population growth. Furthermore there have been shifts from regular utility cycling (which yields the greatest health benefits) to leisure cycling, and in the average age of cyclists, with considerably fewer children now riding⁴⁶.

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