



## How helmet promotion and laws affect cycle use

Almost everywhere that cycle helmets have been promoted, cycle use has fallen. Where promotion has been strong, or the use of helmets made mandatory and the law enforced, falls in cycle use have often been substantial. Taking account of the wider [health benefits of cycling](#), the consequences of deterring people from cycling are far-reaching in a climate where most people lead sedentary lifestyles and illnesses such as obesity are reaching epidemic levels. The people who are likely to suffer most are young people. Teenagers are most easily dissuaded from cycling by cycle helmet promotion.

In several cases falls in cycle use have been greater, in terms of absolute numbers of cyclists, than the increase in helmet use brought about by laws or promotion.

### Australia

Helmet laws in Australia have resulted in large reductions in the number of people who cycle:

<i>State/Territory</i>	<i>Falls in cycle use</i>	
<a href="#">Australian Capital Territory</a>	33% to 50%	
<a href="#">New South Wales</a>	44% to 90% for children	<i>Fall in cycle use 5 times that of increase in helmet use. Cycling levels recovered after the law in this territory was effectively revoked.</i>
<a href="#">Northern Territory</a>	50% commuters 17% to 39% schoolchildren	
<a href="#">Queensland</a>	22% to 30% children	
<a href="#">South Australia</a>	38% schoolchildren	
<a href="#">Victoria</a>	36% to 46% children	
<a href="#">Western Australia</a>	26% to 38% overall More than 50% children	

In some localities overall cycling levels recovered after 10 - 12 years, but the profile of cyclists was very different with a greater proportion cycling less regularly, for recreation only. Cycling by children has generally not revived.

Rissel and Wen, 2011 estimated that repealing the law could be expected at least to double cycle use in Sydney. 1 in 5 adults surveyed said they would cycle more if they did not have to wear a helmet. There was found to be an inverse association between riding frequency and support of the helmet legislation, with those not riding in the past year most likely to support helmet legislation, and more frequent riders less likely to support it.

Gillham and Rissel, 2012 showed that on a per capita basis there were 37.5 percent fewer Australians riding bikes in 2011 than in 1985-86. Population growth had been three times that of recent increases in cycling trips. The most likely deterrent to people cycling was helmet legislation.

### Canada

Helmet laws in Canada have also led to many people cycling less or no longer at all:

<i>Province</i>	<i>Falls in cycle use</i>
<a href="#">Alberta</a>	41% to 59% children and teenagers
<a href="#">British Columbia</a>	28%
<a href="#">Nova Scotia</a>	40% to 60%, greatest reduction among teenagers.

*Fall in cycle use more than twice increase in helmet use.*

In [Ontario](#) it was reported (Macpherson et al, 2002) that cycle use did not fall, based on a study of children in a single community in the City of Toronto. However, it seems that these children were subject to intensive helmet promotion before the law and that this had already suppressed cycling levels (BHRF, 1244). Moreover, the Ontario



helmet law was never enforced and it did not lead to an increase in helmet wearing (Macpherson, Parkin and To, 2001).

## **Denmark**

From 1993 to 2000 the number of children cycling to school fell by 30% while the number taken by car doubled. Older children also reduced their level of cycling by 30% on journeys for leisure. Most of this change has been attributed to changed perceptions and attitudes. In particular, there evolved a much less positive attitude towards cycling amongst parents and children. Parents have limited their children's independent mobility in response to increased traffic, road safety campaigns and media influence. The promotion of cycle helmets during the 1990s is thought to have been influential and to have contributed to the shift from cycling to other modes. (Jensen and Hummer, 2002)

## **Great Britain**

There are no helmet laws in Great Britain but helmets have been promoted strongly in some areas. A study (Bryan-Brown and Taylor, 1997) found that local authorities that had strongly promoted helmets suffered an average 2.8% decrease in cycle use at a time when other authorities, that did not strongly promote helmets, experienced an average increase of 4.9% in cycle use. [Details](#).

From 1991 to 2000, the fall in cycle use in Great Britain was almost twice the increase in helmet use.

Helmet promotion has adversely affected the promotion of cycling in many places by creating the perception that it is unsafe to cycle without a helmet. The strong stand of Government in promoting helmet use, including a statement in the Highway Code that cyclists 'should' wear helmets and the banning of photos of unhelmeted cyclists in official literature, has played a key part in creating uncertainty about encouraging cycling. As a result some employers and institutions have declined to encourage cycling for fear of liability if people who are encouraged to cycle do not wear helmets; and schools and youth groups have banned cycling without helmets, resulting in reductions in cycling among the young.

Research for Cycling England has shown that 27% of women do not cycle in part because of 'helmet hair' – the effect on the appearance of their hair if they were to wear a helmet. (CycEng, 2008)

## **New Zealand**

The New Zealand Travel Survey (LTSA, 1993-7) suggests that cycle use fell by approximately 22% as a result of the country's [helmet law](#). Cycle use by children has especially suffered.

## **Sweden**

All bicycle-related injuries to cyclists fell by 48% in helmet promotion areas compared with 32% elsewhere. The most plausible explanation is a substantial fall in cycle use. (Ekman, Schelp, Welander and Svanstrom, 1997)

## **References**

### **BHRF, 1244**

[Errors and omissions in Canadian research group's bicycle helmet papers.](#) .

<http://www.cyclehelmets.org/1244.html>

### **Bryan-Brown and Taylor, 1997**

Bryan-Brown K, Taylor S, 1997. Cycle helmet wearing in 1996. Transport Research Laboratory Report 286.



### **CycEng, 2008**

[Research for Cycling England](#). YouGov, 2008. **External Link**

<http://www.cyclingengland.co.uk/2008/09/helmet-hair-and-perspiration-prevent-women-getting-in-the-saddle/>

### **Ekman, Schelp, Welander and Svanstrom, 1997**

Ekman R, Schelp L, Welander G, Svanstrom L, 1997. [Can a combination of local, regional and national information substantially increase bicycle-helmet wearing and reduce injuries? Experiences from Sweden](#). Accident Analysis & Prevention 1997 May;29(3):321-8. **External Link**

[http://dx.doi.org/10.1016/S0001-4575\(96\)00086-3](http://dx.doi.org/10.1016/S0001-4575(96)00086-3)

### **Gillham and Rissel, 2012**

Gillham C, Rissel C, 2012. [Australian per capita cycling participation in 1985/6 and 2011](#). World Transport Policy & Practice 2012(May);18(3):5-10. **External Link**

<http://www.eco-logica.co.uk/pdf/wtpp18.3.pdf>

### **Jensen and Hummer, 2002**

Jensen SU, Hummer CH, 2002. [Sikre skoleveje: En undersogelse af borns trafikikkerhed og transportvaner](#). Danmarks Transport Forskning Rapport 3, 2002.

<http://www.cyclehelmets.org/1146.html>

### **LTSA, 1993-7**

[New Zealand Household Travel Survey](#). Land Transport Safety Authority. **External Link**

[http://www.ltsa.govt.nz/research/travel\\_survey/research/travel\\_survey.html](http://www.ltsa.govt.nz/research/travel_survey/research/travel_survey.html)

### **Macpherson et al, 2002**

Macpherson AK, To TM, Macarthur C, Chipman ML, Wright JG, Parkin PC, 2002. [Impact of Mandatory Helmet Legislation on Bicycle-Related Head Injuries in Children: A Population-Based Study](#). Pediatrics 2002; 110(5):e60. **External Link**

<http://www.cyclehelmets.org/1106.html>

### **Macpherson, Parkin and To, 2001**

Macpherson AK, Parkin PC, To TM, 2001. [Mandatory helmet legislation and children's exposure to cycling](#). Injury Prevention Inj Prev 2001;7:228-230. **Link includes commentary**

<http://www.cyclehelmets.org/1105.html>

### **Rissel and Wen, 2011**

Rissel C, Wen LM, 2011. [The possible effect on frequency of cycling if mandatory bicycle helmet legislation was repealed in Sydney, Australia: a cross sectional survey](#). Health Promotion Journal of Australia 2011; 22: 178-83. **External Link**

[http://www.healthpromotion.org.au/journal/journal\\_downloads/article-1-hpja-426-the-possible-effect-on-frequency-of-cycling-if-mandatory-bicycle-helmet-legislation-was-repealed-in-sydney-australia-a-cr](http://www.healthpromotion.org.au/journal/journal_downloads/article-1-hpja-426-the-possible-effect-on-frequency-of-cycling-if-mandatory-bicycle-helmet-legislation-was-repealed-in-sydney-australia-a-cr)

---

The Bicycle Helmet Research Foundation (BHRF), an incorporated body with an international membership, exists to undertake, encourage and spread the scientific study of the use of bicycle helmets. Also to consider the effect of the promotion and use of helmets on the perception of cycling in terms of risk and the achievement of wider public health and societal goals.

BHRF strives to provide a resource of best-available factual information to assist the understanding of a complex subject, and one where some of the reasoning may conflict with received opinion. In particular BHRF seeks to provide access to a wider range of information than is



commonly made available by those that take a strong helmet promotion stance. It is hoped that this will assist informed judgements about the pros and cons of cycle helmets.

For more information, please visit [www.cyclehelmets.org](http://www.cyclehelmets.org).

Document downloaded 20 Apr 2018. The copyright in this document is owned by the Bicycle Helmet Research Foundation, but it may be reproduced or distributed freely so long as the content is not modified in any way.